

Dall, W. H. and Bannister, H. M.

List of the birds of Alaska.

(1869)

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Vol. I. ART. IX. *List of the Birds of Alaska, with Biographical Notes.* By WM. H. DALL and H. M. BANNISTER.

IN presenting this first paper on the results of the Russo-American Telegraph Expedition, it is fitting that a brief account should be given of the circumstances under which those results were obtained.

The prime object of the enterprise was the connection, by a line of electric telegraph, of St. Petersburg and San Francisco. It originated with Mr. P. M. Collins, and was carried on, nearly to a successful conclusion, by the energy of the Directors of the Western Union Telegraph Company.

In 1865 an expedition was organized, for the purpose of exploration, preparatory to the building of the line. This was placed in charge of Captain Charles S. Bulkley, formerly of the United States War Telegraph corps, and an excellent electrician.

In their search for information, the officers of the company made inquiries of the Smithsonian Institution, and were brought into contact with Mr. Robert Kennicott, well known among naturalists from his explorations in the Hudson's Bay Territory.

Under the auspices of the Smithsonian Institution and the Chicago Academy of Sciences, it was finally arranged that Mr. Kennicott should undertake the explorations in the vicinity of the Yukon, for the company, with the privilege of selecting a party of young men competent to make observations and collections in natural history, who were to hold themselves ready, however, for any duty to which they might be assigned. The outfit was contributed by the Chicago Academy of Sciences and the Smithsonian Institution, assisted by the liberality of Captain Bulkley and the directors, among whom may be especially mentioned, Messrs. O. H. Palmer, G. H. Mumford, Anson Stager, and J. E. Wilder. It is especially to the broad and liberal spirit exhibited in a commercial enterprise by these gentlemen, that science is indebted for many valuable additions to her storehouse of knowledge; and it must be gratifying,

even under the loss sustained by the cessation of the enterprise from commercial reasons, to reflect that, at an insignificant expense, results of such magnitude and value in the various departments of science were obtained, while the prosecution of the original enterprise was neither diverted nor delayed.

Starting early in July, 1865, from San Francisco — the members of the scientific corps having arrived *via* Nicaragua, where collections were made — the expedition, by various vessels, touched at the following points: Victoria, V. I.; Sitka; Ounga Id.; St. Paul; St. Michael's, Norton Sound; Grantley Harbor; Plover Bay; Mechigme Bay; Anadyr River; and Petropaulovsk, Kamtschatka. Major Kennicott, with Messrs. Pease and Bannister, of the scientific corps, were landed at St. Michael's, with a party, for the purposes of exploration on the Yukon. Mr. Bischoff, of the scientific corps, was posted at Sitka; Mr. Elliott, in British Columbia; and the writer, appointed in charge of the corps during the absence of Major Kennicott, visited the various points on the Siberian coast, and returned to winter in San Francisco.

We started again in July, 1866, in the flag-ship "Nightingale," under the command of Captain C. M. Scammon, U. S. R. S., to whom the scientific corps is indebted for many favors and constant coöperation. Plover Bay, E. Siberia, was visited, being the rendezvous for the telegraph vessels. Thence the "Nightingale" sailed to St. Michael's, Norton Sound.

Here we were met by the melancholy intelligence of the death of our beloved leader, Robert Kennicott. He died literally "in the harness," on the banks of the Yukon River, at the post of Nulato. His death was caused by disease of the heart, aggravated by exposure and privation, from which he ever endeavored to spare others, but not himself. This lamentable event occurred May 13th, 1866, only a day or two before his proposed exploration of the Upper Yukon. His body, in care of Mr. Charles Pease, who was at Nulato, was carefully conveyed down the river and by sea to St. Michael's.

The direction of the scientific corps then devolved upon the writer, who, considering the exploration of the American continent as the first object to be secured, remained in the Yukon Territory, instead of proceeding to Siberia, as he had intended.

Sailing from St. Michael's in September, Messrs. Pease and Bannister, who had passed the greater portion of the previous season at that point, accompanied the remains of Major Kennicott to San Francisco.

The writer and party started in boats from St. Michael's in October, reached the mouth of the Unalaklik River, crossed the portage to the Yukon, and reached Nulato about December 1, 1866. The writer and Mr. Whymper, the artist of the expedition, remained all winter at Nulato. In the spring, taking a boat and three Indians, they proceeded up the river to Fort Yukon, a post of the Hudson's Bay Company, situated on the western side of the boundary. Here they were hospitably received by Mr. McDougal; and after a few days were joined by the party which had preceded them, and returned down the river to the sea, and thence to St. Michael's.

Here, most unexpectedly, the intelligence was received of the termination of the enterprise. The members of the party were all to return home.

Having previously decided to finish the zoölogical and geological reconnoissance of the Yukon River, and as the lower part of the river had been descended so rapidly that there had been no opportunity of examining the rocks critically, and but little for making collections there, the writer decided to remain in the country, and continue the explorations alone and at his own expense.

Having made an arrangement by which this was effected, the ships having left St. Michael's, the writer proceeded with a boat, and the assistance of the Esquimos, to Unalaklik. Here he remained until November, making various geological explorations along the coast. Crossing the portage in December, he arrived at Nulato, and proceeded to examine the country to the east of that point, near the so-called Innoko River. Afterward, dog-feed giving out, he was unable to proceed, as he had intended, to Kotzebue Sound. Several small trips among the mountains west of Nulato were made during the winter; and in March, notwithstanding a severe attack of illness, he proceeded to St. Michael's.

Returning to Nulato, and carrying a boat over the portage, in the month of June, with three Indians, the writer descended

the Yukon to its mouth, where he remained, until hearing that an American vessel was at St. Michael's, he proceeded to that point, taking passage with Captain Everett Smith for San Francisco, touching at the Pribylof and other islands.

To Captain Smith the writer is indebted for much kindness and many specimens. His unerring aim has added many extremely valuable birds to the collection. The vessel arrived in San Francisco near the end of October, and, shipping the collection, the writer went home in a few weeks, after as many years of exploration and travel.

The collection has been determined by means of the type series of the Smithsonian Institution, and for this privilege, and all other needed facilities, the writer is under great obligations to Professor Henry, the Secretary. The specimens are divided between the Institution and the Chicago Academy of Sciences.

The nomenclature of this catalogue is that of the Pacific Railroad Reports, and the synonymy of the species will be found there, and in the following paper of Professor Baird. The numbers in brackets are those of the species referred to in the check list of North American birds, published by the Smithsonian Institution.

Mr. Bannister and the writer are responsible only for such notes as precede their initials. Great care has been taken in the record of habits and distribution, and it is presumed to be generally accurate. Subsequent collectors will no doubt find many points of interest in regard to the geographical distribution of the species, which our more limited area of collections has not yet made clear.

WM. H. DALL.

SMITHSONIAN INSTITUTION, *June*, 1869.

1. *Falco anatum* Bon. (5.) Duck Hawk. Shot the pair, preserving the skin of the male only, near Nuk'koh, fifteen miles above Saccataloutan, Yukon River. Eyes black, surrounded with a light yellow membrane. Nest on a dead spruce, young nearly ready to fly, June 1st, 1867. Not common, but found from Nulato to Fort Yukon, spring and summer. Also obtained by Bischoff at Sitka and Kadiak. D.

2. *Hypotriorchis columbarius* Gray. (7.) Pigeon Hawk. Several specimens obtained near Nulato, where it is found all the year round.

The Indians value the skins of these birds very highly, using them as ornaments, and their feathers for the shafts of their arrows. They pay among themselves the same price for one as for a marten skin. It occupies the same nest, of sticks and a little straw, generally in the top of a high tree, for years. I have seen a ptarmigan (*Lagopus albus*) killed by one of them. Also from Kadiak (Bischoff). D.

3. *Falco candicans* Gmel. (11.) Jer Falcon. I learned from the residents at St. Michael's that a species supposed to be this one is not infrequent, though it did not come under my own observation. On the voyage home, however, on the 21st of October, 1866, when off the coast of Kamtschatka, a little north of Behring's Island, one of these birds alighted in the rigging of the ship and continued with us for several hours. B.

4. *Falco sacer* Forster. (12a.) Under this name I indicate provisionally an ash-colored Falcon with transverse light bars above, found throughout the Anderson River, Lower Mackenzie and Yukon region, breeding on trees and cliffs indifferently. It never becomes white, and does not correspond at all with specimens of either *gyrfalco* or *islandicus*. As probably the bird meant by Forster, Philos. Trans., Vol. LXII (1772), 423, the name anticipates both *candicans* and *islandicus*, and may therefore be employed without reference to whether either of these last be synonymous. BAIRD.

Obtained a male of this species, which is a resident, though usually confined to the mountains, not frequenting the river, at Nulato, Feb. 10, 1868. The iris is very dark brown and gives all the appearance of black eyes. D.

5. *Astur atricapillus* Bon. (14.) Goshawk. Obtained at Sitka by Bischoff. Pair shot April 24th, 1867, a few miles north of Nulato Fort, on the Yukon River. Nest on a large poplar, thirty feet above the ground, of small sticks. No eggs laid, but several nearly mature in the ovary of female. The nest was on a small island, in a thick grove of poplar. I find this species prefers such situations. This is the most common of the hawks in the Yukon valley and feeds largely on the white ptarmigan (*L. albus*), tearing off the skin and feathers and eating only the flesh. The eggs, four in number, are of a greenish white and usually all laid by the first of May. I have received skins of this species from the Kuskokwim River. A resident. D.

6. *Accipiter fuscus* Bon. (17.) Sharpshinned Hawk. Iris light yellow. A female was killed at Koyukuk, just above Nulato, on the Yukon, April 29, 1867. This hawk is highly prized by the Indians who use the feathers on their arrows and as ornaments during their dances. They count it as equal in value to one marten skin. Also obtained by Bischoff at Sitka. On the Yukon, this hawk is scarce, being, as far as I could learn, only a summer visitor. D.

7. *Buteo Swainsoni* Bon., and var. *insignatus*. (18.) Brown Hawk. Obtained a skin of the variety at Koyukuk, May 26th, 1867, from an Indian. This hawk, preferring the thickets and woody places, is not so often seen as some of the other species. It generally builds a very large nest of sticks, and begins to lay about the last of April. The young are hatched by open water, *i. e.*, 25th to 30th of May. It is a summer visitor, and I found not only the bones of rabbits, squirrels and mice about its nest, but also those of ducks, and in one instance, part of a white-fish. D.

8. *Archibuteo lagopus* Gray. (30.) Rough-legged Hawk. Obtained at Sitka and Kadiak by Bischoff, and by myself, with the eggs, at Fort Yukon; a rather rare bird in the vicinity of the Yukon. D.

9. *Circus hudsonius* Vieill. (38.) Marsh Hawk. Very rare on the Yukon. Occasional at St. Michael's, where a male was killed in November. A summer visitor. D.

10. *Aquila canadensis* Cassin. (39.) Golden Eagle. A skin, from which the leg and wing bones and skull had not been removed or cleaned, was offered to me for sale, at St. Michael's, in June, 1868. It is the only specimen of this species I saw in the country, and was said to have come from the Shaktolik Hills, where it had a nest and two young. D.

11. *Haliaetus leucocephalus* Sav. (43.) Bald Eagle. Nov. 16th, 1867, saw at Iktigalik in the Ulukuk Valley, a skin of a young male of this species. It was in course of preparation for use in some of their Indian dances. The Indians state that it lives in the mountains, where it breeds, building on inaccessible cliffs. This (or *A. canadensis*) often carries off the young reindeer in the spring, and has been known to carry off a child left exposed in the camp. Feeds principally on rabbits, grouse and young deer, but occasionally on fish in the fishing season. Very common at Sitka, where Bischoff obtained eleven specimens. D.

12. *Pandion carolinensis* Bon. (44.) Fish Hawk. This species has been obtained from Sitka, with the eggs, by Bischoff. I obtained several specimens near Nulato, in May, 1867 and 1868. They appear to be not uncommon, but frequent the small rivers rather than the Yukon. They are summer visitors and build an unusually large nest, which they return to every season. D.

13. *Bubo virginianus* Bon. (48.) Great Horned Owl. Iris light yellow. Caught alive, June 18th, 1867, several young males, not fully fledged, except on the body, five days below Fort Yukon, on the Yukon River. Got a skin April 16th, 1868, of an adult male, killed near Nulato. It is not common here, but is found more plentifully further up the river. Also at Sitka (Bischoff). D.

14. *Scops Kennicotti* Elliot. (50a.) Kennicott's Owl. Obtained at Sitka by Bischoff. (See Prof. Baird's paper).

15. *Brachyotus Cassinii* Brewer. (52.) Short-Eared Owl. Not uncommon at Nulato. Frequently flies about in the day-time. One of these birds followed my boat for half an hour when traveling down the Yukon, one cloudy day, until the superstitious fears of my Indians being excited, they shot it. The liver is supposed by them to be a deadly poison if administered by a man, but acts as a love-philtre if received from a woman. If the discovery is made before eating, the charm is broken. D.

The only owl observed on St. Michael's Island, where it was not a very infrequent visitor, though it could not be called common, was seen flying about on one occasion in the day-time, but was generally seen after sundown. The one specimen obtained was unfortunately destroyed by damp. It was picked up dead, though still fresh and undecomposed, and on skinning it many small, white, thread-like worms were found in the cavity of the skull. B.

16. *Syrnium cinereum* Aud. (53.) Gray Owl. Obtained at Sitka by Bischoff. Iris light yellow. April 20th, 1867, got a female shot in Takitesky, about twenty miles east of the Yukon River, at Nulato. April 16th, 1868, and subsequently got a large number, six or eight of both sexes. This owl is very stupid, and may easily be caught with the hand during the day-time. From its awkward motions it has obtained the name of "*Nühl-tühl*," or "*heavy walker*," from the Indians. Feeds principally on small birds; I found thirteen crania and other remains of *Aegiothus linaria* in the crop of one of these owls. Eaten by the old men and women to whom this and a number of similar delicacies are peculiar. If a young person eats it, she will grow old very fast and die early, according to the Indians. D.

17. *Nyctale tengmalmi* Bon. (55.) Sparrow Owl. April 28, 1867, at Nulato, got a female of this species, the smallest owl found here. We often heard it crying, almost like a human being, in the evening at Nulato. It is not uncommon and quite fearless. It can be taken in the hand without attempting to fly away, but bites viciously. Frequently seen in the day time sitting on the trees. According to the Indians, it lays six very round white eggs, generally in a hole in a dead tree. D.

18. *Nyctea nivea* Gray. (61.) White Owl. Iris yellow. Got from Takitesky, near Nulato, a fine female, April 27, 1867. Mr. Thos. S. Denison collected at Egówik, Norton Bay, a male of this species during the month of April, 1867. This species is rather rare in the valley of the Lower Yukon, but I have seen it twice flying over the ice in the winter season. It flies quite readily during the day, and is very alert and active, seldom waiting for one to get in range. D.

19. *Surnia ulula* Bon. (62.) Hawk Owl. Iris light yellow. This is the commonest species of owl about Nulato. Many of both sexes were obtained. April 16th, 1867, took from the ovary of a female an egg ready for laying. I invariably found many tape worms in the intestines of this bird; afterwards, I discovered in the *mouse*, which is the usual food of these owls, the hydatid from which these parasites were developed. (No. 788.) May 5th, 1868, obtained six eggs of this species, (with the male, No. 1517.) They were laid on the top of an old birch stump, fifteen feet high. The rotten wood was somewhat hollowed out and the eggs lay directly on it. The male attacked me while climbing the stump, and knocked off my cap. He had been sitting on the nest. I did not see the female. The eggs are very smooth and pure white. A specimen obtained at Petropaulovsk, Bay of Avatcha, Kamtschatka, was remarkably light colored.

I seldom saw any thing but mice in the crop of this bird, which, toward dusk, is very fond of flying from tip to tip of the tall spruce trees and apparently swinging or balancing itself, calling to its mate at intervals, while chasing, or being chased by him. Eaten by the old men and women among the Indians. Always full of parasites, both internally and externally. Also obtained by Bischoff, at Sitka. D.

20. *Picus villosus* Lin. (74.) Hairy Woodpecker. Three specimens were obtained by Bischoff, at Sitka. The occurrence of this common eastern species in British Columbia and Sitka, while it is not found in Oregon or California, is among the curiosities of the geographical distribution of American birds.

21. *Picus pubescens* Lin. (76.) Downy Woodpecker. Iris reddish-brown. Many of these were obtained, mostly during the winter. It is common from Fort Yukon to Nulato and below Nulato on the river, wherever there are groves of poplar or other non-resinous woods. At Nulato, I have never seen it, as the spruce prevails; but a few miles up or down the river, it is common; particularly at Woollysátuk's barráborá. It is a solitary bird and rather shy; more so than *P. hirsutus*. Also obtained by Bischoff at Sitka.

This species, like the last, is eastern in its general distribution, but seems to occupy the whole of British North America and Alaska from ocean to ocean. D.

22. *Picoides americanus* Brehm. *P. hirsutus* Gray. (83.) Three-toed Woodpecker. Iris white. Many of these obtained; principally in poplar or willow groves, which it prefers to the spruce. A bolder bird than *Picus pubescens*, but less lively in its motions. Common from Fort Yukon to the sea, wherever there are trees.

The Indians dislike this bird. They call it (as well as the other woodpeckers, and the kingfisher) *Tikelklála*. They have a legend, that this bird, many ages ago, in a time of famine, devoured his mate, and wiped

his claws on the back of his head; in proof of which, they point to the yellow mark of the "fat," which remains till this day. D.

23. *Colaptes auratus* Sw. (97.) Iris black, or nearly so. Obtained a fine male of this species, June 23rd, 1867, 150 miles below Fort Yukon, on the river. Mr. McDougal gave me another male skin, taken in May. It is seen rarely at Nulato and the Indians say it breeds there. They call it the *Shot-bird*. A summer visitor.

In this bird we have an example of the remarkable western range of some eastern species north of the Alaskan Mts. D.

24. *Colaptes mexicanus* Sw. (98.) Red Shafted Flicker. This species was obtained by Bischoff, at Sitka, where it takes the place of *C. auratus*. D.

25. *Selasphorus rufus* Sw. (103.) Humming Bird. Abundant at Sitka, where it breeds. Bischoff obtained sixteen specimens. Its occurrence there has been noticed by several arctic voyagers. D.

26. *Ceryle alcyon* Boie. (117.) Kingfisher. This species was received from Bischoff, from Sitka. I found it from Fort Yukon to the sea. Obtained a male near the Melózikarkat River, June 2nd, 1867, and a female at Fort Yukon, June 27th, 1867. This bird is common on the Yukon, wherever a small stream runs into the river. It digs a long tunnel (six to fifteen feet) into some sandbank and on a little dry grass lays its eggs. The tunnel usually curves near the inner end either to the right or left. Toward the end of June, I have noticed the male bird apparently amusing himself by digging holes into the bank near his nest. These holes were never more than two feet in longitudinal extent and from six to eight inches in diameter. He appeared to abandon them as soon as made, but I have seen him fly into one to eat a fish which he had just captured. D.

27. *Turdus nanus* Aud. (150.) Dwarf Thrush. Obtained at Sitka and Kadiak, by Bischoff. Not common. D.

28. *Turdus ustulatus* Nutt. (152.) Oregon Thrush. Three specimens were obtained at Sitka by Bischoff. D.

29. *Turdus Swainsonii* Cab. (153.) Olive-backed Thrush. Eyes black. Obtained quite a number of this species with its nests and eggs. It builds in low bushes and thickets not far from the water. It arrives about the 20th of May and remains all summer. Common all along the river Yukon, from Fort Yukon to the sea. It has a very melodious song, though not a long one, and it does not sing much. D.

30. *Turdus Alliciae* Baird. (154.) Gray-checked Thrush. This species was found, rarely, on the Yukon. Four eggs were obtained in

one instance from a small alder, about six feet above the ground. Nest of hay, lined with scraps of deer hair, feathers and a little moss. It has also been received from Bischoff, collected at Sitka and Kadiak. D.

31. *Turdus migratorius* Lin. (155.) Robin. Iris brown. Common at Fort Yukon and along the river to Nulato. Very common at Nulato. Quite fearless and apparently preferring the vicinity of man. Builds in willows and poplars, not far from the ground, preferring open places where there is a good deal of sunlight. Nest consists principally of mud, grass and feathers, whereas the other thrushes use less mud and more moss, and make a softer nest. It arrives about the middle of May at Nulato, and its monotonous note is heard from every bush. It goes away about the end of August, or earlier, according to the season. D.

32. *Turdus naevius* Gmel. (156.) Varied Thrush. Eye brown. May 22nd, 1867, got a nest, two eggs and parent of this bird, near the Nulato River, R. Am. The nest was built on or in the midst of a large bunch of rubbish in a bunch of willow, about two feet from the ground, and close to the river bank. Eggs bluish, speckled with brown. This bird arrives about May 15th. It prefers the vicinity of water, frequenting the banks of small streams, in retired places. I have seen the male on a prostrate log near the nest, singing with all his might, suddenly cease and run up and down the log for a few minutes, strutting like a grouse, then stopping and singing again; and keeping up this curious performance, till, time being precious, I shot him, with much regret. This species is not very common at Nulato, or elsewhere, but has been received from Sitka and Kadiak (Bischoff), and Cook's Inlet and the Admiralty Islands (Dr. Minor).

The dark collar on the old males is a beautiful glossy black; and the delicacy of all the colors of this bird make it one of the most beautiful, as its song does one of the most melodious, in the Territory. D.

33. *Saxicola oenanthe* Bechst. (157.) Stone Chat. Several large flocks of this species were seen at Nulato, May 23rd and 24th, 1868, and a number of specimens obtained. They are reported to be abundant on the dry, stony hill-tops, where the deer congregate, but rare along the river. D.

34. *Regulus calendula* Licht. (161.) Ruby-crowned Wren. Abundant at Nulato in the spring of 1868; preferring the thickets and alder bushes, away from the river bank. Very courageous; a pair who appeared to be about to commence a nest in a small clump of bushes, tore to pieces a half-finished nest of a blackbird (*S. ferrugineus*), and on the blackbird's return, the pair attacked the female and drove her away. This was repeated two or three times; but I left Nulato (June 2nd) before the dispute was settled. The Indian name of this bird is *T'lik*. They say he is a little chief, and that *Sciurus aurocapillus* is his grandfather. Two were obtained at Sitka by Bischoff. D.

35. *Regulus satrapa* Licht. (162.) Golden-crested Wren. Bischoff obtained a large number of this species at Kadiak, and also at Sitka, where it appears to replace in great measure the last species. It has not been obtained in the Yukon Territory. D.

36. *Hydrobata mexicana* Baird. (164.) Water Ouzel. Feet ashy. Eyes black. This bird is essentially solitary. Several specimens were obtained in January, February, and March, always near some open, unfrozen spot, in some small stream, such as the Nulato River. It is never seen except in the most retired spots, and almost invariably alone. I have never heard it sing. I always examined the crop, but never found anything in it. The Indians told me, and my own observation confirmed it, that this bird, when disturbed, will dive into the water even in mid-winter; and as it is never found but near open water, I suspect it obtains its food from thence. I noticed the legs and bill of some of the specimens were light yellow-ochre color, and others dark slate color. Obtained near Sitka by Bischoff. D.

37. *Budytes flava* Lin. (165a.) Ship "Nightingale," Behring Sea, St. Matthew's Island bearing W. 90 miles; wind NW. by W.; August 10th, 3 P.M.—A small bird flew aboard, apparently from St. Matthew's, that being the nearest land. It was in a much exhausted condition, and died the next morning, having been placed in a cage. Afterward obtained at St. Michael's, Norton Sound, by Pease and Bannister. Eyes black. The specimen was a male. D.

I first observed this species at St. Michael's about the 9th or 10th of June, and from that until well into the month of August, they were among the most abundant birds, perhaps, after *Plectr. lapponicus*, the most abundant of the strictly terrestrial species. During the month of June, I observed them generally in flocks of twenty to thirty individuals. It appeared to me to be a rather shy bird; most of the few specimens obtained were shot on the wing while flying overhead.

In its flight it is like our common goldfinch, *Chrys. tristis*, rising with a few strokes of its wings, then closing them, and describing a sort of paraboloid curve in the air. The only note which I heard and identified as uttered by this species was a kind of faint chirp, hardly to be called a song.

This bird, like the two species of *Plectrophanes* and *Passerculus anthinus*, appears to prefer the open country, and was rarely observed in the low brush, the only approach to timber found on the island. B.

38. *Anthus ludovicianus* Licht. (165.) Titlark. Universal. From British Columbia to Behring's Straits, common every where on open country, near the sea or river side. Obtained by Elliott in British Columbia; Sitka, Bischoff; Ounga Island; Pen. Alaska; Amak Island; St. Michael's, Norton Sound; Yukon River, from Fort Yukon to the sea; Behring's Straits. D.

39. *Helminthophaga celata* Baird. (184.) Orange-crowned Warbler. One specimen was brought by an Indian as the parent, with a nest of *Junco hyemalis*, at Nowikakat, Yukon River, R. Am.

The eggs of this species have been obtained at Fort Yukon. D.

40. *Seiurus aurocapillus* Sw. (186.) Golden-crowned Thrush. One specimen was obtained May 30, 1867, at Kaménsichter, fifteen miles below Saccatalontan, Yukon River, Rus. Am. Also found at Fort Yukon. Breeds, but is not a common bird. Said by the Indians to be the grandfather of the ruby-crowned wren (*R. calendula*). The eye is black. D.

41. *Seiurus novaboracensis* Nutt. (187.) Water Thrush. One specimen, together with nest and two eggs, obtained from a bushy spruce tree, near Fort Yukon, June 1, 1867. Not noticed at Nulato. Eye black. Evidently not a common bird. D.

42. *Phyllopneuste Kennicottii* Baird, n. s. (188a.) Kennicott's Warbler. A single specimen shot at St. Michael's by Mr. Pease. Not observed by Mr. Bannister, who thinks it is not at all abundant. (See Prof. Baird's paper.)

43. *Dendroica coronata* Gray. (194.) Several skins of this species obtained from the Indians at Nuklukahyét, June, 1867. Found at Fort Yukon, and some seasons very plenty at Nulato, where it arrives about May 20th. A melodious and sprightly singer. Breeds in retired places, nest being placed in small bushes. I obtained many of these birds in the spring of 1868, from May 15th to June 2nd, at Nulato. Eye black. Indian name *Tilkut'l*, meaning good singer. D.

44. *Dendroica striata* Baird. (202.) Black Poll Warbler. Two or three specimens obtained at Nulato, May, 1868. Not very common. A pleasing singer. Indian name *Tewéewit'l*. Breeds; arriving about May 15th. D.

45. *Dendroica æstiva* Baird. (203.) Several skins of this species obtained at Nowicargut, from the Indians, June, 1867. A rather common bird all through the territory. I have found it at Fort Yukon, Nulato, and all along the river; also at Ulúkuk, on the Unalaklik River, and it was obtained by Pease and Bannister at St. Michael's. Called by the Indians "*Tewéewit*." Eye black. One nest obtained with eggs on the Lower Yukon. Arrives about May 10th. D.

Tolerably common at St. Michael's. B.

46. *Myiodioctes pusillus* Bon. (213.) Green Black-cap Fly-catcher. Not common. A single specimen of this species shot at Kaménsichter, near Saccatalontan, Yukon River, Rus. Am., May 30th, 1867. Breeds. Eye black. Obtained with nest and eggs at Sitka, by Bischoff, and abundantly at Kadiak. D.

47. *Hirundo horreorum* Barton. (225.) Barn Swallow. May 19th, 1867, at Nulato, obtained a specimen of this species; afterward others, from empty lodge, Lower Yukon.

This species, together with *H. bicolor* and *H. lunifrons*, arrived at Nulato, in 1867, about May 14th. A few stragglers arrived the previous morning. In 1868, two (*lunifrons*) arrived May 10th, but the greater proportion of them did not appear till the 16th. All the species occupy the old mud nests of *lunifrons* at first, but after a fortnight or three weeks they separate; this species almost always building on a beam, or other support. Its nest is well made, containing a good deal of straw, and being lined with feathers, which is not the case with the other swallows. This species has often two broods in a season. D.

Extremely abundant; nesting in the eaves of the buildings in and about the fort. This species made its first appearance on the 26th of May, and in two or three days nearly all the old nests were reoccupied. They left as suddenly, about the last of August or beginning of September.

These birds were protected by the Russians, and had become so tame as to build their nests over the doors and windows, in some instances only seven or eight feet above the terrace or bank surrounding the buildings, and within easy reach of a man's arm. In midsummer, when daylight lasted throughout the twenty-four hours, these birds retired regularly to roost at the usual time; and so trusting had they become that I have repeatedly stroked one, which used habitually to perch on the wooden shutter of the window of my room, without his attempting to fly away, or disturbing himself more than to move his head or arrange his feathers. Iris brown. B.

Also obtained at Sitka, by Bischoff.

48. *Hirundo lunifrons* Say. (226.) Cliff Swallow. Eave Swallow.

This is the most common species at Nulato, where the eaves of the fort, inside and out, are lined with their clay domes. It is also found at Fort Yukon, and the Redoubt, St. Michael's. The Indians say that before the forts were built, this bird made its nest on the face of some sandstone cliff, under some projecting fragment.

H. horreorum frequently builds on the Indian caches, but I have never known this species to do so. D.

49. *Hirundo bicolor* Vieil. (227.) River Swallow; White-bellied Swallow. This swallow is usually seen flying over the water of some of the smaller rivers. It is found from Fort Yukon to the sea, and is known to the Russians as the "river swallow." It is less common than any of the other species. It is regarded as a great delicacy by the old Indian women, who eat them, and pay high prices for them when killed; which is seldom enough, as the bird is always on the alert.

Also from Sitka, by Bischoff. D.

50. *Cotyle riparia* Boie. (229.) Bank Swallow. This species is found, in favorable situations on the Yukon, in immense numbers. I have counted, on the face of one sand-bluff, near Nuklukahyét, over 700 nest holes made by this bird, and all apparently occupied, so that the bluff presented the appearance of an immense honey-comb alive with bees. The eggs are from two to six in one nest, laid on a very small bed of fine twigs, without any straw or feathers. The excavation is from fourteen inches to two feet in length, and takes the bird about four days to make. They usually occupy their old nests, when in good condition. D.

51. *Ampelis garrulus* L. (232.) Waxwing. This bird is quite common near Nulato, but does not arrive till June 10th, or later. I obtained a number of skins from the Indians, taken during my absence up the river. It breeds, and the eggs have been obtained at Fort Yukon. D.

52. *Collyrio borealis* Baird. (236.) Shrike. One specimen was brought, frozen, by the Nowikakat Indians, when they came to Nulato in the winter, to trade furs. They represented it as very fierce, killing small birds like a hawk, and often fighting the crows. I have never seen it alive, and think it is not common. D.

53. *Troglodytes alascensis* Baird, n. s. (269a.) The Alaska Wren. A single specimen of a very common little bird was obtained at St. George's Island, Behring's Sea. A number were shot, but were lost in the luxuriant growth of grass and weeds. It is found all the year round on the island; breeds in May, building a nest of moss in the crevices of the rocks; and, according to the Aleuts, lays six eggs. Eye black. (See Prof. Baird's paper.) D.

54. *Troglodytes hyemalis* Viell. (273.) Winter Wren. Four specimens of this species were obtained by Bischoff at Sitka. D.

55. *Parus atricapillus* Linné. (290.) Black Cap Titmouse. Obtained a number of these birds December 12th, 1866, at Nulato. Not common there. They have also been received from Bischoff, from Sitka and Kadiak. D.

56. *Parus rufescens* Towns. (295.) Chestnut-backed Tit. Bischoff obtained many specimens of this species at Sitka. D.

57. *Parus hudsonicus* Forster. (296.) Hudsonian Titmouse. The commonest titmouse at Nulato. Plenty all winter, but in spring absent, and I never have been able to find either nest or eggs. Eyes black. D.

58. *Eremophila cornuta* Boie. (302.) Skylark. One Indian skin was obtained near Fort Yukon in June, belonging to this species. D.

59. *Pyrrhula coccinea* var. *Cassini* Baird. (302a.) Bullfinch. Nulato, January 10th, 1867.—An Indian brought in a bullfinch alive, but badly wounded, which he had shot from a small tree near the fort. He had never seen anything like it before, nor had the Russians. On showing it to Captain Everett Smith, some time afterward, he said he had seen several flocks of the same species near Ulukuk. This specimen was a male, with black eyes, bill, and feet. It was the only bird of the kind that I saw during two years. (See Prof. Baird's paper.) D.

60. *Pinicola canadensis* Cabot. (304.) Pine Grosbeak. Indian name, *Kiyóútah*. Collected at Sitka and Kadiak by Bischoff. Extremely common near Nulato, and, in fact, where ever there are trees throughout the Yukon Territory. Frequents groves of willow and poplar near open places, and especially the water side, in winter. In summer they go into more retired thickets to breed.

I have opened the crops of a great many, and always found them filled with what I for a long time supposed to be spruce buds; but, on closer examination, I found that they were the hearts of the poplar buds, with the scales and other external coverings carefully rejected. I have never found anything else in their crops. They have no song, only a twitter and long chirp. The flesh is good eating. D.

61. *Curvirostra americana* Wilson. (318.) Red Cross-bill. Obtained at Sitka by Bischoff. Not observed in the Yukon Territory. D.

62. *Curvirostra leucoptera* Wilson. (319.) Not uncommon in winter near Nulato; several specimens were obtained February 8, April 8th and 9th, 1867. They are not found there during the summer. They are very expert at opening the spruce cones with their crooked bill, and extracting the seeds. D.

63. *Aegiothus linaria* Cab. (320.) Red Poll. Common at St. Michael's winter and summer. B.

Very common at Nulato in winter, and very little less so in summer.

The nest is usually lined with hair, and externally covered with moss, dry grass, etc., in bushes near the ground. They begin to build about May 15th. The eggs are laid about June 1st, and the young are flying about toward the end of July.

The young of the first year are dark, often with a small patch of brown on the breast, besides the usual streaked markings. The red forehead is scarcely, and sometimes not at all, perceptible. With their spring moult, the red forehead becomes pronounced; the breast of the male becomes nearly white, with a trace of pink on the throat. The same part in the

female remains ashy, but lighter than before. The second year the breast of the male begins to put on its pink or rosy feathers; the red forehead becomes a little broader and brighter in both sexes.

After the second year, the males annually increase the amount of rose color on head and breast, and the very old ones are very brilliant in the breeding season; and they are perceptibly larger than the young males. The very old females also have a few touches of red on the throat and sides.

A specimen, with nest and eggs, from Unalaklik, Norton Sound, showed darker markings than usual. This was pronounced by Dr. Coues to be his *fuscescens*, as well as others from Kadiak and Sitka.

I have noticed that all the specimens from near the seacoast are darker (slightly) than those from localities far inland.

At St. Michael's, where there are no trees and few bushes, they frequently build in clumps of grass.

These birds have no song, but their cheerful twittering and chirping, their fearless and sociable ways, their bright plumage and elegant nest, are sufficient to make them general favorites; and they are far more worthy to bear the name of robin than the clumsy, greedy, pilfering thrush that usually goes by that name.

D.

64. *Leucosticte griseinucha* Bon. (323.) Gray-necked Finch. This species abounds on the Pribylof and Aleutian Islands. A number of specimens were obtained on St. George's, in August, although they were moulting at the time. Captain Smith's unerring aim brought down the first specimen, with many other valuable birds, for which we are indebted to him.

This beautiful bird had no song at that season except a clear chirp, sounding like "Wéet-a-wéet-a-wée-weet." It was on the wing a great part of the time, avoiding lighting on the ground, but darting rapidly in a series of ascending and descending curves, now swinging on the broad top of an umbelliferous plant, and now alighting on some ledge of the perpendicular bluff, jumping from point to point, and seemingly delighting in testing their own agility.

Their nest is a simple hollow on one of these ledges, provided with a few straws or bits of moss. They lay four white eggs in May. In August the young were fully fledged. They are graminivorous, apparently, but I found two or three small beetles in the crop of one which I skinned. Also received from Kadiak and Unalashka, through Bischoff and Dr. Minor.

D.

65. *Leucosticte littoralis* Baird, n. s. (324a.) Island Finch. Received from Sitka through Bischoff and J. Hepburn. (See Prof. Baird's paper.)

D.

66. *Plectrophanes nivalis* Meyer. (325.) Snow Bunting. Goes in flocks; at times excessively common, at times totally absent. Builds

on the hillsides, on the ground generally, under the lee of a stone. Obtained many of these birds at Nulato, in the winter of 1867-8. It is much more common there than *P. lapponicus*, which was only seen in the spring, while this species is abundant the year round.

It was also obtained by Bischoff at Sitka, and by myself at St. George's Island. The specimens from the last named locality have a yellowish appearance on the breast, which I have not noticed in any Yukon specimens. Indian name "*hokohyzoa*," or "little white bird." D.

This species is altogether less abundant than the *P. lapponicus*, and, as far as I observed, seemed to prefer rather different situations. On St. Michael's Island, I never noticed one of this species far from the sea shore, while the other species was abundant every where over the mossy tundra of the interior of the island. During the summer, I never saw this species in greater numbers than one or two together, nor any where except near rocky points, and on some of the small rocky islands a little off shore, which they seemed to share with the ravens and puffins. In the autumn, however, they are more gregarious, but still seemed to prefer the vicinity of the water. I have followed a small flock for upwards of a mile along the beach, they following all the indentations of the shore, flying short distances at a time, but just keeping at long gun-shot. In general, however, this bird can not be called shy. I have observed this species at Unalaklik, where it is common. B.

67. *Plectrophanes lapponicus* Selby. (326.) Lapland Longspur. Arrives at Nulato about May 12th, and is not at any time a very common bird. Did not find the nest during my stay at Nulato; was informed by the Indians that it built on the bare hillsides, in hillocks of grass, and will not leave the nest when any one comes near, but sits perfectly still, thus often escaping discovery. A fine singer. Received from Sitka through Bischoff. D.

By far the most abundant of the land birds which are found on the Island of St. Michael's. It appeared there first about the 6th of May, and from that time until the middle or latter part of September was observed in great numbers over the island.

I did not find the nest, although the birds were started up by the hundred on every walk over the island, I therefore think that it must be very carefully concealed. I often searched for it, but always with the same want of success. This species is, in my opinion, decidedly the best songster of the family. B.

68. *Plectrophanes pictus* Sw. (327.) Smith's Bunting. Obtained at Fort Yukon, at the mouth of the Porcupine River, by Strachan Jones. Much more abundant in the Mackenzie River district. D.

69. *Passerculus savanna* Bon. (332.) Savannah Sparrow. Common on the Yukon; at St. Michael's not rare, also Unalaklik. Found at Sitka by Bischoff. A pleasant though feeble songster. Arrives at

Nulato about the 1st of May, and breeds; nest with four eggs, in bush, two feet above the ground, not very unlike that of *Ægiothus linaria*.

D.

70. *Passerculus sandwichensis* Baird. (333.) Nootka Sparrow. Two specimens were collected at Sitka by the indefatigable Bischoff.

D.

71. *Passerculus anthinus* Bon. (334.) Spotted Sparrow. Obtained from the Yukon, St. Michael's, Sitka, and Kadiak. It is a universal species, found every where, and every where common. It is the commonest summer bird at Nulato, and very common at Unalaklik. It always builds near the water; the nest usually in a tuft of grass. It has a habit of wagging its tail up and down while hopping along the beach, which is very noticeable. The lachrymal glands are larger than in most birds of its size. It arrives late, about June 1st.

D.

A common species at St. Michael's, appearing at about the same time as *Plect. lapponicus*, and remaining throughout the summer. I have but little to say of its habits, except that it seems to prefer the vicinity of the sea shore, never having observed it very far inland. I failed to find its nest, although it probably breeds on the island.

B.

72. *Passerculus alaudinus* Bon. (335.) Lark Sparrow. Five specimens were obtained from Sitka, through Bischoff. Mr. Lockhart obtained it on the Yukon.

D.

73. *Zonotrichia Gambelii* Gam. (346.) Gambel's Finch. Tolerably abundant in the alder bushes in some parts of St. Michael's Island.

B.

Common at Nulato; very common at Fort Yukon. Arrived at Nulato about May 20th. Nest and eggs obtained from Indians at Nowikakat, Yukon River.

D.

74. *Zonotrichia coronata* Baird. (347.) Golden-crowned Sparrow. Many sent from Sitka and Kadiak by Bischoff, and British Columbia by Elliott.

D.

75. *Junco oregonus* Sclat. (352.) Oregon Snowbird. Eight specimens collected by Bischoff at Sitka.

D.

76. *Junco hyemalis* Sclat. (354.) Black Snowbird. Common at Nulato in the spring, arriving a little later than the other birds, about June 1st. Breeds, but I did not find its nest, though one with four eggs was offered for sale by a Nowikakat Indian, with *Helm. celata* as parent. Called "Sukalyóza" by the Indians, meaning *little widow*, on account of its color and rather lugubrious chirp.

D.

77. *Spizella monticola* Baird. (357.) Tree Sparrow. One specimen obtained at Sitka by Bischoff. Not very common on the Yukon, where Mr. Kennicott obtained the eggs. I got this species at Nulato, and below that point, on the river, sparingly. D.

78. *Melospiza insignis* Baird, n. s. (362a.) Kadiak Sparrow. Obtained at Kadiak by Bischoff, where it is not a rare bird. (See Prof. Baird's paper.) D.

79. *Melospiza rufina* Baird. (366.) Rusty Song Sparrow. Bischoff obtained this species abundantly at Sitka. D.

80. *Melospiza Lincolnii* Baird. (368.) Lincoln's Finch. Found rarely at Nulato, and more commonly at Fort Yukon, where the nest and eggs were collected by Mr. Lockhart. D.

81. *Passerella iliaca* Sw. (374.) Fox-colored Sparrow. Abundant at Nulato, where it arrived May 10th to 15th. Breeds; the eggs were obtained at Fort Yukon by Mr. Lockhart. In the months of August, 1867, and July, 1868, abundant at the mouth of the Yukon and at St. Michael's. One was also shot at Unalaklik, but it seems to prefer thickets to the more open tundra. D.

Not abundant; I shot one specimen during the season of 1865-6, in an alder thicket near the fort, and Mr. Pease, who knew the species well, also reported having seen a single specimen. B.

82. *Passerella Townsendii* Nutt. (375.) Oregon Finch. Bischoff collected four specimens at Sitka, and several at Kadiak. D.

83. *Scolecophagus ferrugineus* Swains. (417.) Rusty Blackbird. Arrives at Nulato about May 20th, where it is tolerably abundant and very tame. They breed a little later than some of the other birds. I saw one nest commenced about the end of May, but left Nulato before the eggs were laid. The latter were obtained by Mr. Lockhart at Fort Yukon. Bischoff also got a few specimens at Sitka. D.

84. *Corvus carnivorus* Bartram. (423.) American Raven. Abundant all the year at Nulato, and every where throughout the Territory, but appears to prefer the vicinity of man, being much more common near the Indian villages and trading posts than in the unpeopled wilderness. It builds on the face of the sandstone cliffs at Nulato, selecting some little cavity, and occupying the same place for years. The nest is very large, of sticks, dry grass, and all sorts of refuse; but the eggs are small, six or eight in number, and very much pointed. They lay very early, about April 20th, and the young are hatched some time before open water.

The raven is very intelligent, and on several expeditions, made to obtain the eggs, the instant we stopped at the foot of the bluff, there was a great outcry, and the whole colony arranged themselves on the edge of the rock, in anxious consultation, uttering repeated cries of warning to their companions; and on one occasion, having to go back unsuccessful, on account of the inaccessibility of the nest, it was difficult to doubt the meaning of the intelligent and joyous croak and derisive screech which announced our departure.

Their Indian name is *Klah'whún* or *Tut'tchóné*, and the Eskimo, *Toolookagúk*. This bird is considered as a great knave and cheat, and is mixed with many of their superstitions, and always appears in their stories and legends. He is one of the four personifications which the Thlinkets adopt as their totem or "*lux-paté-uk*." They are very abundant at Sitka, and Lutke says: "The ravens are the police of Sitka; active, vigilant, silent, nothing escapes their eyes. No poultry can be raised, for the ravens devour the fledglings as fast as they appear, making only one mouthful of them. The porkers are too large to be overcome in that manner, and the ravens are obliged to satisfy their greediness by keeping the pigs' tails close cropped. This is the reason why Sitka pigs have no tails!" I am inclined to think that, since Lutke's time, the ravens have given it up as a bad job, as, in spite of the story and the results which might have been reasonably looked for according to the doctrine of selection, the Sitka pigs have at present tails very much like those of pigs in more favored situations. D.

Common all the year; especially abundant during the summer months on one or two small islands lying off the northeast point of St. Michael's Island, which they share with the puffins, cormorants, and occasionally *Plectrophanes nivalis*. B.

85. *Corvus caurinus* Baird. (428.) Western Fish Crow. Several specimens received from Sitka through Bischoff. D.

86. *Picicorvus columbianus* Bon. (430.) Clarke's Crow. One specimen received from Bischoff, collected at Sitka. D.

87. *Pica hudsonica* Bon. (432.) Magpie. Abundant at Sitka; observed at Ounga, one of the Shumagin Islands, and obtained by Bischoff at Kadiak. D.

88. *Cyanura Stelleri* Sw. (435.) Steller's Jay. Abundant at Sitka and in British Columbia, whence many specimens have been received through the untiring Bischoff and Mr. Elliott. D.

89. *Perisoreus canadensis* Bon. (443.) Canada Jay. One specimen seen at St. Michael's, and killed by Mr. Pease, near the Redoubt.

Known by the name of "*whisky jack*" all through the Hudson Bay Territory, and to the Russians as *sóyah*. A very bold and familiar bird,

which frequently will fly down and steal the dinner from some hungry dog, if he is not on the alert, or the fish, hung up in camp by the Indians to dry. It breeds very early, occupying the same nest year after year. The nest is very large, and composed entirely of soft materials, moss, hair, and the like. Having offered a large reward for the eggs, to my surprise, about April 20th, an Indian brought me a nest with four half-fledged young, so that it must lay some time in March. The eggs have been obtained at Fort Yukon, and the bird is abundant every where on the Yukon River, but not south of it. D.

90. *Tetrao obscurus* Say. (459.) Dusky Grouse. Seven specimens of this species collected at Sitka were received from Bischoff. D.

91. *Tetrao canadensis* Linné. (460.) Spruce Partridge. Although called the spruce partridge, it lives among the willows in retired places, and feeds, at Nulato, exclusively on willow buds. The eye is light brown; the flesh is white and very delicate, altogether the best eating of any of the partridges. The body and breast bone and intestine are much longer proportionally than in the other species. The Indian name is *Tchûnkûter*, and it is called *Rapchik* by the Russians. It is the least common of the grouse at Nulato. D.

92. *Pedioecetes phasianellus* Bd. (463.) Sharp-tailed Grouse. This species is not uncommon at Fort Yukon, where Lockhart obtained the eggs; and it is found some two hundred miles down the river, but does not pass the cañon known to the English as the Ramparts.

Captain Ketchum killed several of these birds on his adventurous winter trip from Nulato to Fort Yukon. D.

93. *Bonasa umbellus* Steph. (465.) Ruffed Grouse. Not uncommon in the vicinity of Nulato. Loves the deep spruce groves, away from the river, and feeds exclusively on the spruce buds, with the flavor of which its flesh is aromatic. When aimed at, it does not fly, but dodges around the trunk of the tree on which it is sitting. Lays its eggs in May; once I found them in the hollow of a decayed stump, about six feet above the ground. Its flesh is not as good as that of *T. canadensis*, but much better than that of *L. albus*. D.

94. *Bonasa Sabinii* Baird. (466.) Oregon Grouse. A few were obtained in Sitka and British Columbia by Bischoff and Elliott. D.

95. *Lagopus albus* Aud. (467.) White Ptarmigan. *Telmikka*, Indian; *Corapátka*, Russian. Two specimens obtained at Sitka, and one at Kadiak, by Bischoff.

Abundant from Fort Yukon to the sea. It feeds exclusively in winter on willow buds, and I have taken a double handful from the crop.

As soon as the ground is well covered with snow, these birds appear on the river, where they may generally be found in coveys, among the willow thickets. They are moderately shy, and on alarm, fly immediately, but without much noise. They make regular paths along the banks, among the willows, on which they always run; and the Indians set a small barrier of brush on each side of this path, and a snare directly across it, and catch them by hundreds in this manner, though the vigilant ravens and foxes are ever on the watch to devour the bird as soon as snared. They are abundant in the fall and mid-winter. In February they gather in immense flocks, and go nobody knows where. About the middle of March they return as suddenly, and remain a few weeks, when they go altogether to the mountains or open country, where they pair and breed. These facts have been known to me from observation for two years, and the Russians and Indians bear witness that it is so every year. In 1867 they left about February 15th, and came back about April 1st, leaving for the mountains about May 3rd. In 1868 they left about February 10th, and came back March 21st, leaving for the mountains April 28th, going and coming in great flocks, like a snow squall. They begin to moult about the middle of April, and leave before the change is very great. The feathers of the head, and outer edges of the wings, and upper tail coverts change first. They never, as far as I have seen, assume the summer dress completely, always retaining more or less of the white among their brown feathers. It is hard to imagine a more dirty, bedraggled-looking object than a female of this species during incubation. At this period, a series of capillaries in the skin of the abdomen become suffused and engorged with serous fluid, which forms a sort of cushion or pad, a quarter of an inch thick, over the whole abdomen, and quite naked. This, of course, assists in the process of incubation, but it, and the dirty yellow of the feathers mixed with dirty white feathers, give the bird a disgusting appearance. The summer dress of the male, though I have never seen it complete, is of a much darker red-brown, and a rather handsome color. I obtained eggs in an open tundra, near the Yukon mouth, in the latter part of June, 1868. The female defends her nest bravely; one allowed itself to be torn in pieces by a dog, rather than desert her eggs.

They begin to assume the white in September, and in November, having become perfectly white, repair to the willow thickets along the Yukon and other rivers, as before mentioned. The flesh is dark, dry and tasteless; a long experience in eating it has not left a favorable impression.

D.

Common on the island and the adjoining mainland during the greater part of the year, but especially abundant in the spring, when they are to be found singly or in pairs all over the country. In the fall and winter they keep more to the thickets of stunted willows, which are common in the interior of the island; and are generally started in small coveys. From their appearing to be less abundant at this than at some other seasons of the year on the coast, I have been inclined to think that the greater part

of them went into the wooded districts of the interior, where they could find greater shelter and more abundant food. In midsummer, also, they appeared to be scarcer on the island. I saw but very few at that season, compared to their numbers in the early spring.

The change of plumage in the spring generally commences in April, and continues for about a month, and perhaps a little more, when it is ordinarily as complete as it will be; although in the males there is always a considerable proportion of white feathers, every where except on the head and neck. In the females the change is more rapid and more complete; I have seen some in nearly, if not quite, full summer plumage. The head and neck in the males are generally the first in the spring and the last in the autumn to change their color. The white is generally fully assumed in the fall, before the 1st of November.

During the breeding season, the sexes exhibit a strong attachment to each other, and the male bird will even sacrifice his own life rather than desert a wounded mate; one instance of this has come under my own observation.

B.

96. *Lagopus rupestris* Leach. (468.) Rock Grouse. This species is not uncommon in the Gens du Large (? Romanzoff) Mountains, north-west of Fort Yukon, and has been obtained at Fort Yukon by Sibbeston, and in the former locality by Mr. McDougal. It is not found further south or west, to the best of my knowledge.

D.

97. *Grus canadensis* Temm. (479.) Sandhill Crane. Called "*Teltútla*" by the Indians, who are fond of domesticating the young. They eat up the vermin and insects, as well as the scraps of food about the camp. The young are downy until their first moult, when the red appears, very much as it does in the turkey poult. Occasionally they seem to suffer from an arrest of development, and Mr. Bannister says: "A young but well-grown specimen had the entire head fully covered with feathers." A common bird at St. Michael's and the Yukon mouth, but rarer in the interior; not often seen at Nulato. The eggs, obtained June 17th, on the Yukon River, are laid in a small depression in the sandy beach, without any attempt at a nest. The flesh, well cooked, is fair eating, but rather strong. The fibula is a favorite substitute for a pipe stem with the Indians and trappers.

D.

Common in the marshes of the island of St. Michael's and the adjoining mainland.

B.

98. *Ardea herodias* Linn. (487.) Great Blue Heron. Rare at Sitka; obtained by Bischoff.

D.

99. *Charadrius virginicus* Borek. (503.) Golden Plover. Common at St. Michael's.

B.

Obtained by Bischoff at Sitka and Kadiak. Common at Nulato and all along the Yukon River, where it arrives in the latter part of May.

Eggs, generally two in number, are laid in a hillock of grass, with a little dry grass, and sometimes a few feathers. D.

100. *Aegialitis semipalmatus* Cab. (507.) Semipalmate Plover. Very common at Nulato, St. Michael's, and the mouth of the Yukon. Eggs are laid in a small depression in the grass, made very smooth and round, and lined with a little dry grass, very carefully put in. There are generally only two eggs, and they often differ a good deal, even in the same nest. This bird is not very shy, and is fond of running about just within reach of the small wavelets, probably to obtain any food that may be washed ashore.

Eight specimens were obtained at Sitka by Bischoff. D.

101. *Squatarola helvetica* Cuv. (510.) Black-bellied Plover. Three specimens were sent from Sitka by Bischoff. Not rare on the Yukon, and not very common. Arrives about the first of June near Nulato; but the eggs were not observed, though it doubtless breeds in the vicinity. D.

102. *Aphriza virgata* Gray. (511.) Surf Bird. Four specimens were sent from Sitka by Bischoff. D.

103. *Haematopus niger* Pall. (513.) Bachman's Oyster Catcher. Obtained by Bischoff at Sitka, and also at Kadiak abundantly. D.

104. *Streptilas interpres* Ill. (515.) Turnstone. Not common at the Yukon mouth. D.

105. *Streptilas melanocephala* Vig. (516.) Black Turnstone. Common at St. Michael's. B.

Rare at Nulato. Arrived May 23rd, 1868; was not observed in 1867. Common toward the sea, on the river, below Nulato. Lays two dark-colored eggs, in a small excavation, usually on the beach, near the water. Common at the Yukon mouth. Many were obtained at Sitka by Bischoff. D.

106. *Lobipes hyperboreus* Temm. (520.) This beautiful little bird is very common all along the Yukon, and is found plentifully at the mouth of that river. I have observed it running among stranded blocks of ice on the muddy beach at Nulato, stopping and glancing around every few steps; the pure white of the breast more conspicuous by the black mud over which it passed. It differs from most birds, in that the female is brighter colored than the male. Two eggs in a small round nest, lined with dry grass, were found at Pastolik. It is usually gregarious. D.

This species was quite abundant on some of the small fresh-water ponds; and probably nests in some of the sedgy places in these localities, though I failed to find their breeding-places. Eggs of this species were, however, brought from the vicinity of Unalaklik by Mr. R. D. Cotter. B.

107. *Phalaropus fulicarius* Bon. (521.) Red Phalarope. Not very rare at the Yukon mouth in June, 1868. Abundant at Plover Bay, on the Asiatic side of Behring Straits, in large flocks, in July and August. D.

I shot one of this species at the Redoubt, in the fall of 1865, but the skin was unluckily spoilt. In 1866 I observed none until September, when I saw a few flocks along the beach, just before I embarked for San Francisco. It seems, like *Tringa maritima*, to be common there only in the autumn. B.

108. *Gallinago Wilsonii* Bon. (523.) English Snipe. Obtained at Sitka and Kadiak by Bischoff. Rare on the Yukon. D.

109. *Macrorhamphus griseus* Leach. (524.) Red-breasted Snipe. Not common at the Yukon mouth and at Pastolik. D.

110. *Macrorhamphus scolopaceus* La. (525.) Greater Longbeak. Common at the Yukon mouth and Pastolik. Rather rare up the river, and at Nulato. D.

Common, though not extremely abundant. I found the nest of this species on the 3rd of June, and on the 6th secured the parent bird with the eggs. The nest was a simple hollow in the ground, in a grassy hummock, in the centre of a marshy spot, with scarcely any lining whatever—nothing in the shape of a nest to bring away. The eggs were four in number, of a brownish color, mottled with a still deeper tint. The female, when startled from the nest, shuffled off with great rapidity among the grassy hummocks, making a very difficult mark to shoot at. I failed to secure the bird on the first discovery of the nest, and was indeed unable to obtain a sufficiently good view to identify the species, but by marking the spot, and visiting it a second time, I succeeded. But one parent was seen either time. B.

111. *Tringa canutus* Linn. (526.) Knot. Rare at the Yukon mouth. One specimen obtained at Sitka by Bischoff. D.

112. *Tringa maritima* Brün. (528.) Purple Sandpiper. One specimen of this fine snipe was obtained a mile or two below Nulato, on the Yukon. Another at Pastolik. Nest and eggs not seen. I also obtained one at St. George's Island, Behring's Sea, where it was common on the dry uplands and on the hills. Bischoff got this species plentifully at Sitka, and also at Plover Bay, on the Asiatic side of Behring Straits. D.

In October, 1865, I obtained a number of specimens of this species at the Redoubt, where it then appeared to be quite common. In the succeeding year, I did not observe the species up to the 1st of October, when I left the country. B.

113. *Pelidna alpina* var. *americana* Cas. (530.) Red-backed Sandpiper. Common at St. Michael's (B.) and in British Columbia (Elliott).

Ten specimens obtained at Sitka by Bischoff. Not uncommon at Nulato, and plenty at the Yukon mouth, where the egg was obtained; nest much like that of *Lobipes hyperboreus*. D.

114. *Actodromus maculatus* Vieil. (531.) Jack Snipe. One collected at Sitka by Bischoff. Not uncommon at Plover Bay. D.

115. *Actodromus Bairdii* Coues. (531a.) Baird's Snipe. One obtained by Bischoff at Sitka, and several at Kadiak. Not rare on the Yukon. One obtained on Amak Island, north of the peninsula of Alaska, by Captain Everett Smith. D.

116. *Actodromus minutilla* Coues. *Tringa Wilsonii* Nutt. (532.) One male obtained, May 14th, 1867, at Nulato, where it is not common. Rather more plentiful at the Yukon mouth, where the eggs were obtained. Bischoff collected this species at Sitka. D.

117. *Calidris arenaria* Ill. (534.) Sanderling. Two specimens obtained by Bischoff at Sitka. Very common at Nulato and on the Yukon to the sea. Arrives early, about May 10th to 15th, and is one of the last birds to leave in the fall. I have seen them on the edge of the ice in October, apparently quite comfortable. D.

118. *Ereunetes pusillus* Ill. (535.) Semipalmated Sandpiper. Very common at Sitka and Kadiak, where Bischoff obtained many specimens. Plenty at Nulato, and all along the river and sea shore, like the last species. D.

Very common throughout the spring and summer, and nesting over the island. The nests which I observed were simple hollows in the ground, with nothing more than a few blades of grass for lining, and were generally placed in some dry tuft of grass, some distance from the water. The bird, when startled from the nest, would generally fly a little distance and alight, showing but little timidity.

In the month of May, when shooting ducks and geese near St. Michael's, I have seen these little birds all around me, even within a few feet, and apparently unmindful of my presence, even when shooting at ducks or geese flying overhead. B.

119. *Gambetta melanoleuca* Bon. (539.) Stone Snipe. Several specimens obtained at Sitka by Bischoff. D.

120. *Gambetta flavipes* Bon. (540.) Yellow Legs. Obtained at Sitka and Kadiak by Bischoff. Not rare at Fort Yukon, where Mr. Loëkhart obtained the eggs. Found sparingly at Nulato and the Yukon mouth. D.

121. *Rhyacophilus solitarius* Bon. (541.) Solitary Sandpiper. Found sparingly at Nulato during the month of May. Arrives about May 5th. D.

122. *Heterosceles brevipes* Baird. (542.) Wandering Tattler. Two obtained at Sitka by Bischoff. Rare on the Yukon. D.

123. *Tringoides macularius* Gray. (543.) Spotted Sandpiper. A few specimens obtained at Nulato about the end of May, from the 16th to the 30th. Not scarce at St. Michael's in the fall. Obtained at Sitka by Bischoff. D.

124. *Actiturus bartramius* Bon. (545.) Field Plover. Obtained by Mr. Lockhart at Fort Yukon. D.

125. *Tryngites rufescens* Cab. (546.) Buff-breasted Sandpiper. Two specimens obtained on the Yukon, below Nulato; rare. One obtained at Sitka by Bischoff. Breeds abundantly in the Anderson River region. D.

126. *Limosa hudsonica* Sw. (548.) Hudson Godwit. Two specimens obtained at the Yukon mouth. Not common. D.

127. *Limosa uropygialis* Gould. (549a.) Very common at the Yukon mouth, and on the Pastolik marshes to the north of it. The largest snipe found in the country. Lays two light olivaceous-spotted eggs, in a rounded depression in a sedge tussock, lined with dry grass. Very good eating, being quite as large as a teal. (See Prof. Baird's paper.) D.

128. *Vanellus cristatus* L. Lapwing. A bird was described to me by one of the Russian hunters as having been killed on one of the small islands in Norton Sound, off the mouth of Golsova River. From this description, which could apply to no other bird of the country, and agreed well with the colors and crest of the lapwing, I am induced to believe that stragglers of that species may occasionally occur there. D.

129. *Numenius hudsonicus* Lath. (550.) Hudsonian Curlew. Not very common at St. Michael's. B.

Obtained at Sitka by Bischoff. Not rare at the Yukon mouth, where its favorite attitude is sitting on a high stump or piece of drift wood, or even an alder bush when large enough, with one leg drawn up. D.

130. *Numenius borealis* Lath. (551.) Eskimo Curlew. Obtained at Fort Yukon by Messrs. McDougal, Lockhart, and Jones, but not yet observed to the south or west of that point. D.

131. *Fulica americana* Gm. (559.) Coot. Obtained only by Mr. McDougal at Fort Yukon. D.

132. *Cygnus americanus* Sharpl. (561a.) Swan. Common all along the Yukon. Arrives with the geese about May 1st, but in a contrary direction, coming down instead of up the Yukon. Breeds in the

great marshes near the Yukon mouth. The eggs, two in number, vary from pure white to fulvous, as do the parents on the head and neck, apparently without regard to age. The eggs are usually on a tussock quite surrounded with water, and very near it, so that the female must sometimes sit with her feet in the water. The Indian name is "*Toh-wah*." The eggs are usually laid about May 21st at Nulato, but later at the Yukon mouth. In July the swans moult and can not fly, and the Indians have great sport spearing them with bone tridents. They are very shy birds, and usually shot on the wing or with a bullet. This species, if hung long enough, is tender, well flavored, and excellent eating. D.

Common; all the specimens of swans examined were of this species, all having a patch of yellow on the bill. The spot was not large, however, and in one or two instances was only just visible, and might be overlooked on a casual observation. This bird generally flies in small flocks of ten or a dozen, and in a single line, advancing obliquely like the geese. B.

133. *Cygnus buccinator* Rich. (562.) Trumpeter Swan. Obtained on the headwaters of the Frazer River by Mr. Elliott, and at Fort Yukon by Mr. Lockhart, who also got the eggs. D.

134. *Anser (Chen) hyperboreus* Pall. (563.) White Goose. Indian name "*Hohk'h*," or "great white bird." Common in the spring. This species arrives about May 9th, flying from the southward up the river; but they only stop to feed and rest on the marshes during the dusky twilight of the night, and are off with the early light of an Arctic spring. They can only be shot on the wing, or at night. They do not breed in the vicinity of the Yukon, nor do they return in the fall by the way they came. The skin is very thin and tender, resembling that of *Chloephaga*. These birds are almost always lean, and have a perceptible odor to their flesh, which is, however, pretty good eating. The eye is dark brown. These geese are usually all gone by May 30th, or earlier. D.

Common in early spring. When out hunting on the flats up the canal, at daybreak, on the 5th of May, 1866, I noticed all the flocks of this species, and of *Cygnus americanus*, flying south. From this I judged that they generally travel in the night time, and the direction of their flight, to the northward of this, being over the open sound, they had unawares passed over their camping ground, and as soon as daylight had discovered to them their error, they turned backwards in their course. B.

135. *Anser Gambelii* Hartl. (565.) White-fronted Goose. Extremely common. Arrives at Nulato about May 6th to 10th. Breeds, all along the river, gregariously, laying six to ten eggs, in a depression in the sand, without any kind of a nest or lining. I have found the eggs all along the river, from Fort Yukon to the sea, and thence to St. Michael's. In very

old ones, the breast is almost all black. I have seen young ones, a year old, without any black at all. The Indian name is "*Tutsundh*." D.

Abundant in the spring, and the only species which, to my knowledge, breeds in the vicinity of St. Michael's. It nests on Stuart's Island, and I believe also on St. Michael's. One of the first of the geese to arrive in the spring. B.

136. *Bernicla canadensis* Boie. (567.) Canada Goose. Not uncommon at Fort Yukon, where the eggs have been obtained. Also obtained by Bischoff at Sitka. D.

137. *Bernicla canadensis* var. *occidentalis* Baird. (567a.) Western Goose. Two specimens obtained by Bischoff at Sitka. D.

138. *Bernicla leucopareia* Cas. (568.) White-cheeked Goose. Common in the early spring at St. Michael's. B.

Abundant on the seacoast near the Yukon mouth, where it breeds, but very rare at Nulato or farther inland on the Yukon. Eggs obtained at Pastolik. D.

139. *Bernicla Hutchinsii* Bon. (569.) Hutchins' Goose. The most common of all the geese. Breeds at St. Michael's and Pastolik, as well as all the way up the river, where it is very common; and takes the place of *leucopareia*, which is rare there. Eggs, six or eight, laid on the sand beaches like those of *A. Gambelii*. Arrives with the latter species, and remains till fall, leaving about the end of September. It is not at all unlikely that *B. Hutchinsii* and *leucopareia* are one species. D.

140. *Bernicla nigricans* Cas. (571.) Black Brant. This goose arrives in immense flocks in the spring along the seacoast, but is rarely seen on the Yukon. I killed one, May 29th, 1868, at Nulato, which was said to be a very rare visitor. They pass Fort Yukon in the spring, as they do St. Michael's, being present but a few days, and breeding on the shores of the Arctic Ocean. I was informed at Fort Yukon that it is not seen there in the fall. Unlike the white geese, they return to Norton Sound in small numbers in the fall. I killed one specimen, a female, September 28th, 1867, at Unalaklik, sitting on the edge of the ice, in a small river at that place. The crop was full of small crustaceans. This goose is always lean, tough, and of disagreeable flavor. It is also very shy. The few that appear in Norton Sound in the fall, are the last of the geese except the *canagica*. D.

A few of this species were killed at St. Michael's the season I was there; it was said to be altogether less abundant that spring than ordinarily. It arrives there about the 12th of May; almost the last of all the migratory birds. They were observed in the fall of 1865 on September 23rd, on their return.

Usually, the black brant is said to come in immense flocks, and to

afford more profitable sport for a few days than all the other species put together. The flight of the main body of these migratory birds seems to me to be along the western edge of St. Michael's Island, touching Stewart's Island, and then directly northward, across the open sea, towards Golownin Sound. I saw no such large flocks passing the Fort as I saw down the canal flying towards Cape Stephens. B.

141. *Chloephaga canagica* Bon. (573.) Emperor Goose. This magnificent bird abounds in profusion in the Kúsilvak Slough, or mouth of the Yukon, to the exclusion of all the other species. My endeavors to reach that point being unavailing, I was obliged to do my best to obtain specimens elsewhere. It is quite scarce around the Kwichpak Slough, and on the seacoast. By offering a large reward, I obtained four fine specimens from the marshes around Kutlik. It is the largest of the geese of the country; and the delicate colors of the body, with the head and nape snow white, tipped with rich amber yellow, are a beautiful sight. The eye is dark brown; feet, flesh color. The eggs are larger and longer than those of *A. Gambelii*, and rather brown fulvous, the color being in minute dots. It lays on the ground, like the other geese. The Eskimo name is *Nachóuth'luk*. The raw flesh and skin have an intolerable odor of garlic, which rendered it a very disagreeable task to skin them; but when cooked this passes away, and the flesh is tender and good eating.

This goose arrives about June 1st, or earlier, according to the season. As soon as the eggs are hatched, they begin to moult. I saw half-moulted specimens at Pastolik, July 29th, 1867. It remains longer than any other goose, lingering until the whole seacoast is fringed with ice, feeding on *Mytilus edulis* and other shell fish. Has been seen as late as November 1st, by the Russians. It usually goes in pairs, or four or five together, rather than in large flocks. Its note is shriller and clearer than that of *A. Gambelii* or *B. Hutchinsii*, and it is shyer than the other geese, except the black brant. D.

Two specimens of this species were shot at St. Michael's during the period of my stay there, both of them rather young, and not in the best of plumage. It can not be considered common at that particular point; but Mr. Pease reported having seen large numbers of them on the lower Yukon, while descending the river in June.

The flesh of this species is exceedingly strong-smelling, so much so as to leave a taint upon the hands from skinning it, which can hardly be washed off. It is entirely unfit for food, except for the Indians and Eskimos, who will eat anything. B.

142. *Anas boschas* Linn. (576.) Mallard. Indian name, *Nintála*. One of the first ducks to arrive in the spring at Nulato, generally about the 1st of May, in company with *B. albeola*. Common both on the seacoast and in the interior. I have found the eggs, eight in number, in a rotten stump about six inches above the level of the ground, laid directly

on the rotten wood, and covered with dead leaves and a few feathers. This duck is here very poor eating, tough and lean. Obtained at Sitka by Bischoff. From the scalps of these ducks the natives prepare various ornaments for their dress. D.

143. *Dafla acuta* Jenyns. (578.) Pintail. Common on the small ponds on the Island of St. Michael's and the adjacent mainland. B.

Extremely common on all parts of the Yukon, and on the marshes near the seacoast. In the early spring, arriving about May 1st at Nulato, it is gregarious; but as soon as it commences to breed, about May 20th, or later, they are generally found solitary or in pairs. Their nest is usually in the sedge, lined with dry grass, and, in the absence of both parents, is covered with dry leaves and feathers. They fly more swiftly than any other duck, and are hard to hit on the wing. They lay from six to ten or even twelve eggs; and as soon as the young are hatched, they withdraw from the river into the small creeks and rivulets, where they remain till the ducklings are fully able to fly, when all repair to the great marshes, where, on the roots of the horsetail (*Equisetum*), they grow so fat that they frequently can not raise themselves above the water. They leave for warmer latitudes about the end of September. This species is excellent for the table. Also obtained at Sitka and Kadiak by Bischoff. D.

144. *Nettion carolinensis* Baird. (579.) Green-winged Teal. Very common at St. Michael's. B.

This beautiful little duck is one of the early comers, and one of the first to lay. I have obtained the eggs from a nest of dry grass in a sedge tussock, about May 20th, at Nulato. It is solitary in its habits, except while migrating. It is far superior to any other duck for the table. It lays a large number, sometimes sixteen or eighteen eggs. It has been obtained from Sitka and Kadiak by Bischoff, and is not rare any where in the Yukon Territory. D.

145. *Querquedula discors* Steph. (581.) Blue-winged Teal. Found at Fort Yukon and at the Yukon mouth sparingly. Not observed at Nulato. Captain Smith saw it and obtained the eggs from near Cape Romanzoff. D.

Not very abundant, but not uncommon. Several specimens were seen in the hands of the hunters in the early spring. B.

146. *Spatula clypeata* Boie. (583.) Shoveller. This species is said to breed at one point in the canal, between the Island of St. Michael's and the mainland. I have never seen it alive, but obtained a skin from one killed at Unalaklik. It can not be abundant any where near the Yukon. D.

I have frequently seen this species among the birds brought in by the hunters of the Fort during the month of May, at St. Michael's. B.

147. *Mareca americana* Steph. (585.) Baldpate. Not uncommon near Nulato and on the Yukon. Rather rare at St. Michael's. Eggs and nest resemble those of *Dafila acuta*, but the bird is less active and slower in flight than that species. D.

148. *Chaulelasmus streperus* Gray. (584.) Gadwall. One specimen was obtained in British Columbia by Mr. Elliott, and it is probable that its range extends to the vicinity of Sitka. D.

149. *Fulix marila* Baird. (588.) Gogle (Rus.). Greater Blackhead. Abundant at Sitka, where it was plentifully obtained by Bischoff. One of the first ducks to arrive, and common on the Yukon and the seacoast. I obtained the eggs at the mouth of the Yukon in the early part of June. Nest very rude, a mere excavation with a few straws about it. Poor eating, usually tough and lean. D.

150. *Fulix affinis* Baird. (589.) Little Blackhead. Not uncommon at the Yukon mouth, where the eggs were obtained. D.

151. *Aythya vallisneria* Bon. (592.) Canvas-back Duck. Quite common at Fort Yukon, where it breeds in abundance. I have never seen it southwest of that point on the Yukon. D.

152. *Bucephala americana* Baird. (593.) Golden-eye. This was the first duck killed at Nulato, May 3rd, 1868, and is always early in arriving. It is common on the Yukon and on the seacoast. The eggs were obtained near Pastolik, from the marshes. A skin of this duck, stuffed and ornamented with beads, used as an ornament in the lodge, was bought from some Indians on the Yukon, near the Mission. D.

153. *Bucephala islandica* Baird. (594.) Barrow's Golden-eye. Obtained by Bischoff at Sitka, and rarely on the Yukon. D.

154. *Bucephala albeola* Baird. (595.) Butter Ball. Not uncommon on the Yukon, where it breeds. It is abundant at the Yukon mouth, where there are no trees, except scrubby willow and alder, and probably breeds there. Obtained by Bischoff at Sitka. D.

155. *Histrionicus torquatus* Bon. (596.) Obtained at Sitka and Kadiak by Bischoff. Rather rare in the vicinity of the Yukon. This is an essentially solitary species, found alone or in pairs, only in the most retired spots, on the small rivers flowing into the Yukon, where it breeds; and not, except accidentally, on the main river. D.

156. *Harelda glacialis* Leach. (597.) Safka (Rus.). Old Squaw. Very common at St. Michael's; was one of the last ducks to leave in the fall of 1865. B.

An extremely common duck on the seacoast, but very rare on the Yukon. One specimen was killed June 1st, 1868, at Nulato, while the

river was full of floating ice. The color differs a great deal in different individuals at the same season. An expert diver; hard to shoot except on the wing. The long tail-feathers, when the bird is at rest on the water, stick up at an angle of 60°. Breeds abundantly on every beach, in a very simple nest without any lining. D.

157. *Polysticta Stelleri* Eyton. (598.) Steller's Duck. Kadiak (Bischoff). D.

158. *Lampronetta Fischeri* Brandt. (599.) Spectacled Eider. This rare duck breeds only in the marshes between the Island of St. Michael's and the mainland, which are intersected by a narrow channel called the *canal*. It is not found near the Yukon mouth, nor even a few miles south of the canal; nor, according to the repeated assertions of the natives, at any point on Norton Sound to the north of St. Michael's. Its winter habitat is unknown, possibly Cook's Inlet or Bristol Bay. It is not abundant, even at St. Michael's. Several specimens, which were reported to have come from other localities, have been definitely traced to this point. The Russian name for all the eiders is *Pistrak*, and this species is known as the small *pistrak*.

A nest was discovered in the centre of a small pool in a marsh, built on a tussock just above the surface of the water. It was oval, lined with dry grass, and contained two eggs, which were surrounded and covered with down, evidently from the breast of the parent. The eggs are small for the size of the bird, of an olivaceous brown. There was a number of others breeding in the vicinity, and also a number of the *S. v-nigra*; and some eggs were obtained which, from their resemblance to identified specimens, were probably those of *S. spectabilis*, although the parent was not fully identified. The eye of the *Lampronetta* is dark brown or hazel, not blue as has been asserted. The fall plumage of male and female is nearly identical; it is a dark brown with black pencilings, only the faintest indication of the spring markings remaining. When flying, these birds usually go in flocks. The last one killed in 1867 was got September 27th, but they probably remained a short time longer. D.

Moderately common near Fort St. Michael's. Some fifteen or eighteen individuals were shot during the spring of 1866, of which I secured the greater number.

This species, and *Som. v-nigra*, arrive a little later than most of the other ducks and some of the geese, making their appearance usually about the 6th of May. In habits the two species are apparently very similar, both breeding in this vicinity. The *Lampronetta* is, however, I think, the shyer of the two, and the more difficult to observe on that account. It breeds in the vicinity; its nest, as described by Mr. Dall (who saw two of them), and other parties, is a simple depression in a grassy hummock, without any lining other than the grass and a little down and feathers.

In July and August, during the moulting period, this bird is said to

be unable to fly; it is reported that on Stewart's Island, just west of St. Michael's Island, great numbers of them have been killed by the Eskimos with sticks and clubs. The skin of this species is used by these natives, when prepared in a certain way, for caps, and is esteemed of some little value among them. The scalps of these birds, also, with their silky, bright green plumage, are sometimes used for adorning their skin dresses.

The flight of this species is rapid, more so than that of most other ducks, and is generally low, very near the surface of the water. The iris was of a rather dark hazel color in all the specimens obtained.

B.

159. *Melanetta velvetina* Baird. (601.) Velvet Duck. A female of this species was obtained about fifty miles below Fort Yukon, on the river, where it is not uncommon. The eye is black. Shortly afterward I secured several of the young ducklings, still in their downy coat, June 23rd, 1866. Mr. Bannister thinks it is found at St. Michael's, but, like myself, has not identified it certainly. Bischoff obtained it at Sitka abundantly.

D.

160. *Pelionetta perspicillata* Kaup. (602.) Surf Duck. This species was obtained with the eggs, at Sitka, by Bischoff. I have not identified it certainly, but think it may rarely be found at the Yukon mouth.

D.

161. *Pelionetta Trowbridgei* Baird. (603.) Long-billed Scoter. Two specimens were collected by Bischoff at Sitka.

D.

162. *Oidemia americana* Sw. (604.) Scoter; Black Duck. A salt-water duck, abundant at the Yukon mouth, but not entering it for any distance. Obtained the eggs near Pastolik, June 17th, two in number, quite white and rather large. The nest was well supplied with dry grass, feathers, leaves and moss, and was among a bunch of willows on a small island.

D.

Common. I have never seen this species in any of the small fresh-water ponds of the island except on one occasion, when I started a small flock in such a situation. Ordinarily they kept to the salt water, even flying around points of land rather than directly across.

B.

163. *Somateria v-nigra* Gray. (607.) Pacific Eider; Large Pistrak (Rus.) Common at St. Michael's in the month of July, my observations not extending earlier. Its range appears to be nearly as limited as that of *L. Fischeri*, though individuals are much more numerous, and large flocks of males are frequently seen near the fort. In September they have all assumed a uniform brown, with dark pencilings. The eye is hazel. They appear to leave in a body about the 1st of October. They breed abundantly, but I did not get the eggs.

D.

The species is extremely abundant on the North Coast, especially between the mouths of the Mackenzie and Coppermine.

BAIRD.

Abundant; breeding in the vicinity of St. Michael's. In the early spring, when this species first made its appearance, the sexes appeared to be in about equal numbers, and were generally together. In June, however, I noticed numerous small flocks composed entirely of males; and still later in the season, in the latter part of July, and in August, the flocks were apparently all females, though perhaps partly composed of males in autumn plumage. Throughout the month of July, however, solitary males could often be started on the small, outlying, rocky islands, apparently in full spring colors, though generally unable to fly. They escaped by rapid swimming and diving, it being very hard to shoot them or to follow them in a kayak, unless under very favorable circumstances.

My observation of this species led me to think that they disliked swimming in rough water. On windy days I have generally seen the small flocks of them squatting at the top of the beach, or swimming only in the more sheltered coves and inlets.

The noise made by this species in the spring is peculiar. When many are heard together, as is generally the case, it more resembles a continuous grunting than any thing else. B.

164. *Somateria spectabilis* Leach. (608.) King Eider; Pistrak (Rus.). Near the Rapids, on the Yukon, I found a specimen of this species lying dead on the beach. It was, of course, immediately recognized by the peculiar bill, which was preserved. A series of eggs from St. Michael's, of which the parent was not identified, except as to its being an eider, appeared, on comparison, to belong to this species, which, it is evident, must be quite rare. D.

A third species of Eider was often mentioned by the Russian residents, but I was unable to identify the bird by their descriptions. It is, at any rate, extremely rare; but few have ever seen it. It may possibly be the *S. spectabilis*, as it was described as smaller than the common species, *S. v-nigra*. B.

165. *Mergus americanus* Cas. (611.) Shelldrake. Found at Sitka by Bischoff. One specimen obtained at Fort Yukon, by Mr. Lockhart. Not observed by any of our party during three years explorations on the Yukon and its vicinity. D.

166. *Mergus serrator* Lin. (612.) Red-breasted Merganser. Common during the summer months, and the only species of shelldrake noticed during that time, at St. Michael's. B.

Received from Sitka and Kadiak, through Bischoff. Killed one in May, near Nulato; several at St. Michael's, in July. Not a very common bird at any locality. On a small island, in the Yukon, near its mouth, I found six nests of this species, all carefully concealed under dead leaves. They were generally under a log of drift-wood, in a small hollow, and lined with down from the breast of the parent; six to ten eggs, of a rich cream-color, in each. The parents flew round and round the island, but out of range. D.

167. *Lophodytes cucullatus* Reich. (613.) Hooded Merganser. Not obtained by any member of the party. If an inhabitant of the country, it is extremely rare. D.

I observed one large flock of this species, in October, 1865, only a short time before the harbor froze up. I shot one, but having no boat, was unable to secure it. Not observed at any other time. B.

168. *Graculus dilophus* Gray. (623.) Double-crested Cormorant. Two specimens were obtained at Sitka by Bischoff. D.

169. *Graculus violaceus* Gray. (627.) Violet-green Cormorant. Very common at Sitka and Kadiak, where it was collected by Bischoff. Plenty at St. George's Island, Behring's Sea, where Captain Smith obtained several specimens. D.

I quote both this name and the preceding with some doubt. BAIRD.

Common. Found in the same situations as the puffins, *Mormon corniculata* and *M. cirrhata*. B.

170. *Graculus bicristatus* Pallas. (627a.) Plenty at St. George's, where I obtained specimens. The colors reflected from the feathers, in life, are very brilliant, and the skin near the eye and bill passes from bright crimson, near the bill, to a bright blue purple, toward the feathers. (See Prof. Baird's paper.) D.

171. *Diomedea nigripes* Aud. (633a.) Gony. This bird is very common in the North Pacific, following the ships for weeks. They are not found in Behring's Sea; but several times, as soon as we had passed the islands, we were joined by a company of these birds, who accompanied us to San Francisco. They are generally dusky, but the old males have more or less white on the head. They are very greedy, swallowing all sorts of scraps thrown overboard, and a favorite amusement in a calm is to fish for them with a hook and line, baited with pork. With the exception of the small petrels, they are the only birds I have seen in the North Pacific off soundings.

These "gonies" follow the ship for hundreds of miles. They feed upon all manner of filth, and have no good qualities that I know of, except that of being indefatigable on the wing. They are dirty, awkward, ugly, and cruel to wounded ones of the same kind. They have an angry, envious note, only uttered when some more fortunate bird has secured a greedy morsel, and a croaking whine, in which they give vent to their apprehensions just before a storm. They hardly ever fly more than fifty feet above the water, and usually keep about thirty feet above it. They rise by unfolding their wings and running a few steps in the water, and then a few strokes send them into the air. On a rough day they rise quickly, but always in the same manner, while, in a dead calm, they often have to run ten or twenty feet before getting out of the water. They can not rise from the deck. Their wings are so long that the motion of unfolding them is like unfolding a carpenter's rule, and the

wings in rising or falling are kept perfectly stiff; and folded, only when the bird is settled in the water, seemingly as a job by itself. When half folded the wings form a triangular arch over the back, which looks very awkward in a bird. They will remain in the air sometimes five minutes without moving the wings in flight, though they do not remain at the same height, but slide from side to side, like a sheet of paper, falling slowly. They have two ways of alighting. One is to fly against the wind, with the wings stiff extended, and the feet spread and stuck out in front, and going into the water at an angle very obtuse. The outspread web-feet soon check their speed. The other way is to stretch out the legs stiff, and at full length, behind, and to tip over into the water *backwards*, on their posteriors, exactly as if they were sitting down on a chair, and somebody had pulled the chair away. They rest very calmly on the water when once settled, and swim slowly and laboriously. I have never seen them nearer land than the Farralones, and suppose they breed on rocky islets off the northern coast. It seems singular that there should be no gulls, terns, albatrosses, or even, except very rarely, petrels, in the eastern part of the North Pacific Ocean. D.

172. *Fulmarus Rodgersi* Cas. (638a.) St. George's Fulmar. Abundant at the Island of St. George's, where Capt. Smith and myself obtained specimens. (See Prof. Baird's paper.) D.

173. *Thalassidroma Leachii* Temm. (642.) Petrel. Obtained abundantly by Bischoff at Sitka. The specimens were more rusty-colored than is usual with this species. D.

174. *Nectris tenuirostris* Temm. (651.) Seal bird. This bird—a badly-prepared, but perfect skin—was bought of Isaac Koliak, an Eskimo of great intelligence. He said he had bought it as a curiosity, at Kotzebue Sound, when on a visit, never having seen such a bird on Norton Sound. He gave a yard of cotton for it; and the Kotzebue Sound Eskimo told him that it was called the *Múklok tingmyuk*, or seal bird, as it was only found with the seal, and followed them in their migrations. D.

175. *Stercorarius parasiticus* Temm. (654.) Arctic Skua. Obtained at Kadiak by Bischoff. Common on the Yukon, as far up as Nulato. Plentiful at the Yukon mouth. The natives and Russians have many absurd and superstitious notions connected with the yagers, and call them *rasbinik*, or murderer bird, and say they eat berries!

I never saw it alight except on the water or smooth beach. They are said to lay on the beach, like the gulls, but I did not obtain the eggs. The long feathers of the tail differ much in length, often in the same individual. The iris is dark brown. These birds are very swift on the wing. D.

Less abundant than *Sterc. Buffoni*, but still common. According to my observation, it is also rather more shy.

I frequently observed at St. Michael's a *Stercorarius* with an apparently even tail, but was at only one time near enough to observe it closely. I was walking on the beach, near the Fort, when I saw the bird engaged in eating a fish on the sand. It allowed me to approach within about one hundred feet, and then rose, leaving its prey, a tom cod about nine inches long, and flew away. I was unfortunately without my gun, and therefore failed to secure the specimen. I had a chance, however, to see the tail feathers, which seemed to be all very nearly of a length. The size of the bird was apparently not greater than that of *Sterc. parasiticus*, and the color was uniformly a brownish black, with a lighter spot on the wings. No white on the belly or neck, as in *parasiticus*.

The Russian residents also described to me a *rasbinik*, or yager, entirely like *S. parasiticus*, excepting that it was darker underneath. This may possibly be the species, the projecting tail feathers having been worn off or lost in the individual mentioned above. B.

176. *Stercorarius Buffoni* Baird. (655.) Common at St. Michael's. All the specimens obtained of this species were shot on the ground. They have apparently a habit of sitting on the mossy tundra or heaths; and I have followed one for over a mile at a time, he flying short distances and alighting, but most provokingly keeping just out of range of my gun, which was not very reliable for long shots. I have heard this habit of theirs, of alighting on the tundra, accounted for by the statement that they were eating the berries which abound in these situations. I have thought myself that they might be after the eggs of other species, but never succeeded in finding them eating them, or in finding any nests in their vicinity. The reputation they have of sucking eggs is, however, very probably well deserved.

I have never found the nests of this species, although, as the bird was common throughout the spring and summer months, it undoubtedly breeds in the vicinity of the Fort. B.

Obtained by myself at the Yukon mouth, and by E. K. Laborne at Anadyr Gulf, E. Siberia. D.

177. *Larus glaucus* Brün. (656.) Burgomaster. Not rare about St. Michael's, but does not ascend the river. D.

178. *Larus Hutchinsii* Rich. (656a.) White Gull. Obtained at Fort Yukon by Mr. Lockhart. Not observed by any of our party. D.

179. *Larus glaucescens* Licht. (657.) Glaucous Gull. Bischoff obtained specimens of this species at Sitka, and others at Kadiak. It is a common species on the west coast, from California northward. D.

180. *Larus leucopterus* Brün. (658.) White-winged Gull. This gull is abundant on the Yukon below Anvik. Above that point it is rare, and replaced by *L. argentatus*. The eggs were laid on the bare

sandy beach, in a small depression, about June 5th to 10th. Very common about St. Michael's. D.

The most abundant species of large gull which is found at St. Michael's. B.

181. *Larus argentatus* (var) Brün. (661.) Abundant on the Upper Yukon, where it replaces the *leucopterus* of the Lower Yukon. Arrives before the ducks, about May 2nd. Breeds on the islands in the river, whence I obtained the eggs, which were laid like the other gulls, on the bare ground, in a slight depression. Also plentiful at Plover Bay. D.

182. *Larus borealis* Brandt. (655a.) This species or variety connects very closely with *Larus argentatus* and *occidentalis*. With the wing marking of the former, the back is nearly as dark as in the latter. BAIRD.

Not uncommon at St. Michael's, and plenty at Plover Bay, E. Siberia. D.

183. *Larus brachyrhynchus* Rich. (664a.) Short-billed Gull. A river gull, abundant from Fort Yukon to the sea, but not on the sea-coast. Obtained by Bischoff at Sitka and Kadiak. I obtained the eggs in abundance at the Yukon mouth, where a variety was noticed with a bright yellow bill. I also obtained the young gulls in downy plumage, near Fort Yukon. The black and white pattern on the wings varies a good deal; not in itself, but in relation to the different feathers, as if it had been carelessly stamped on by hand with a die. The old Indians eat them. D.

Abundant on the marshes and ponds up the canal or channel separating the Island of St. Michael's from the mainland. Not so abundant on the open water near the Fort. B.

184. *Chroicocephalus philadelphia* B. (670.) Bonaparte's Gull. Not uncommon in the marshes near the Yukon, but rare on the main river. They are most numerous on the Kaiyuh River, not far from Nulato, where they breed. The eggs have been obtained near Fort Yukon; and it is not very rare at Sitka, where Bischoff obtained specimens. D.

185. *Rissa tridactyla* Bon. (672.) Kittiwake Gull. Two specimens were obtained at Sitka by Bischoff. The young were shot at Amak Island, north of Aliaska, by Captain Smith. They have black on each side of the neck. They are abundant at Sitka and Plover Bay. D.

186. *Rissa brevirostris* Brandt. (674.) Short-billed Kittiwake. This bird, occurring by thousands over a small lake on the Island of St. George's, is conspicuous by reason of its coral-red legs and feet, which would seem to indicate that this is the true form described under this name by Brandt.

The specimens in the collection of the Smithsonian Institution have yellowish legs and feet, but scarcely differ otherwise. None such were observed at St. George's, and the yellow-legged ones, if a variety of the same species, are certainly well marked. They have, apparently, been described by Gould as *R. brachyrhynchus*, from Kamtschatka.

The eye of the St. George's bird is dark gray. Specimens were obtained by Captain Smith, August 15th, 1868. D.

187. *Xema Sabinii* Bon. (680.) Fork-tailed Gull. Abundant in the marshes about Pastolik and St. Michael's, where it breeds. Not rare at Plover Bay, E. Siberia. I have never observed it far inland, in strictly fresh water, and it is not found at Nulato. D.

In the early part of July, I observed large flocks of these birds in the canal; and the two specimens obtained were shot by Mr. Pease in the same locality and at very nearly the same period. I have never observed the species at any other point near the Redoubt. B.

188. *Sterna macrura* Naum. (690.) Arctic Tern. This pretty tern is abundant every where on the Yukon, and also on the marshes near the seacoast, but is seldom seen on the open Sound. In traveling along the Yukon, large flocks of these birds can be seen hovering over the water, often keeping in one place, hanging suspended, so to speak, in the air for ten or fifteen minutes, almost motionless. At other times they will sit on a stick of drift-wood, chattering to one another, or gather in a sort of ring around a shoal of small minnows, eating, diving and screaming with equal vivacity. They are quite fearless, especially when a companion is wounded or killed, or their young are menaced. They will gather around a wounded friend in large numbers, cry to it, and even attempt to assist it to rise from the water. Their note, when not disturbed, is between a hiss and a whistle, but when alarmed it is a sharp cry or scream, somewhat like that of a gull; and they have a sort of cluck or chatter when at rest, to attract the attention of their mates. These birds are extremely inquisitive; they have often followed my boat for miles, at a short distance from it. An Indian, one day, was tracking the boat up stream, by walking on the bank with a strap over his shoulder. One of these birds, perhaps alarmed by his proximity to her young, rose to a considerable height, and descending swiftly in a long curve, just brushed the ribbons in his cap, and rose again, leaving him in a great state of astonishment, not having seen the bird, which, however, immediately repeated the act, and in all perhaps half a dozen times. Finally he became so annoyed, his superstitious fears being aroused, that he took a large stick, which he was obliged to throw at the bird several times before he could drive it away.

They lay two dark-spotted eggs, in a small excavation, lined with dry grass and a very few feathers. The young were obtained, in the down, June 22nd, near Fort Yukon, and have the coral-red legs and bill from the first, by which they are readily distinguished from the young gulls,

which are also larger. The eggs were found, at the Yukon mouth, June 14th, 1868. The young of the first year have very little black on the head.

D.

Abundant, and not at all shy. It is perhaps the easiest of all birds to shoot, for anything, even the hunter's presence, will attract them within gunshot; and when one is killed or wounded, the whole flock gather around, and will hardly be dispersed as long as the body of their fallen companion is in view, or until more of their number have been shot. In the month of June and the latter part of May, flocks of them could always be seen hovering over some of the small marshes and ponds near the Fort; and had I deemed the specimens of sufficient value to excuse the slaughter of these beautiful birds, an almost unlimited number might have been obtained.

B.

189. *Sterna aleutica* Baird, n. s. (694a.) White-tailed Tern. Obtained with the egg at Kadiak by Bischoff. (See Prof. Baird's paper.)

D.

190. *Hydrochelidon fissipes*. (*H. plumbea* Wils.) (695.) Short-tailed Tern. One specimen, with the egg, obtained from an Indian, who collected it on the marshes near Fort Yukon, in June.

D.

191. *Colymbus torquatus* Brün. (698.) Loon. Not uncommon on the Yukon, particularly near the sea. It was obtained by Mr. Kennicott at Fort Yukon.

D.

Common. The skin of this species is used by the Eskimos to a considerable extent in their dresses, etc., and when prepared by sewing up the neck and legs, is commonly used as a bag to contain their working tools.

B.

192. *Colymbus arcticus* Lin. (700.) Arctic Diver. Common at St. Michael's.

B.

The skins, or parts of them, particularly the skin of the neck, are in favor with the coast tribes south of Norton Sound for clothing. The tough skin, and strongly implanted feathers, make the plumage of the divers particularly serviceable. They are obtained while breeding in the shallow lagoons where they cannot dive, and are netted by the natives in large numbers. I have seen one dress containing over a hundred loons' throats of this species alone. The eggs were obtained at Fort Yukon.

D.

193. *Colymbus septentrionalis* Lin. (701.) Red-necked Loon. Abundant at St. Michael's.

B.

One specimen was obtained at the rapids on the Yukon River, when I returned from Fort Yukon, July, 1867, and it is rather common at St. Michael's, and at the Yukon mouth. The remarks in regard to *C. arcticus* apply also to this species.

D.

194. *Colymbus Adamsii* Gray. (701a.) Adams' Diver. Kadiak (Bischoff). D.

195. *Podiceps griseigena* Gray. (702.) Red-necked Grebe. Not uncommon at St. Michael's, and on the marshes on the river up to Fort Yukon, where Mr. Kennicott obtained the eggs. Bischoff also collected it at Sitka. D.

196. *Podiceps cornutus* Lath. (706.) Horned Grebe. Killed a number of this species at Nulato, May 25th and 26th, 1868. Not very common. The ball of the eye is white, with a bright scarlet areola around the outer edge of the iris, which is defined by a white line. The iris proper is bright crimson. The inner edge is brilliant white, with a shade of pink in it; and the pupil within consists of a broad ring of dark purple, with a central spot of black, producing a most brilliant effect. This was a female, with one egg well developed in the ovary. Bought a parent and two eggs of an Indian at Fort Yukon, in June, 1867. D.

197. *Mormon cirrhata* Bon. (712.) Tufted Puffin. Not very common at St. Michael's. Abundant on Besborough Island. Plentifully obtained by Bischoff at Sitka and Kadiak. D.

At St. Michael's, though by no means scarce in the same situations, the Tufted Puffin is very much less abundant than the *M. corniculata* — at least five or six of the latter may be seen to one of the former.

The tufts of this species are indicative of maturity, young individuals, although otherwise nearly fully fledged and able to fly, having these but very imperfectly developed.

Both this and the other species are used as food by the Eskimos, and their tough and thickly plumaged skins are, together with the skins of loons, etc., made into winter dresses by the Magemuts and Southern Unaleets. B.

198. *Mormon corniculata* Naum. (713.) Horned Puffin. Extremely common on the rocky islets near St. Michael's. Observed by me at Plover Bay, Coal Harbor, Ounga Island, and Aliaska. Has been obtained at Kotzebue Sound, and was abundantly received from Sitka and Kadiak through Bischoff. D.

Abundant on Whale Island north of the harbor. The island is steep and rocky, and difficult to land upon, except in very favorable weather. Upon the only occasion on which it was visited no nests were discovered, though I am confident that both this species and *M. cirrhata* breed there, and young birds, scarcely able to fly, have been captured. The reason of the nests not being seen is due to the structure of the island. The birds nest in the deep and narrow joints, and interstices of the rock, generally entirely out of reach of any thing except blasting powder. Even if the nest was within reach of a man's arm, it would be hazardous to attempt to rob it without full assurance of the absence of the parent bird, which, with its powerful bill, and the advantages of its situation,

could inflict a very severe wound. An Eskimo boy in our service, having captured a nearly grown young puffin of this species, put it, for security, and in lieu of a pocket, under his parki, or sole upper garment, the result was almost a *hari kari*. B.

199. *Sagmatorrhina labradoria* Cas. (716.) Labrador Auk. Two specimens received from Kadiak through Bischoff. D.

200. *Cerorhina monocerata* Cas. (717.) Sea Hornbill. Nine specimens received from Sitka, collected by Bischoff. D.

201. *Phaleris cristatella* Bon. (719.) Crested Auk. Received from Kadiak through Bischoff. D.

202. *Phaleris tetracula* Steph. (720.) Dusky Auk. Several specimens shot at Plover Bay, Eastern Siberia, are due to Capt. Everett Smith. It probably frequents both sides of the Straits. D.

203. *Phaleris microceros* Brandt. (722.) Horned Auk. Obtained from the peninsula of Aliaska, Island of St. George's, and Plover Bay, East Siberia, where I collected it. D.

204. *Phaleris pusilla* Cas. (723.) Least Auk. Abundant about the peninsula of Aliaska. Specimens from Plover Bay have the bill wider and deeper than usual, according to Dr. Coues. D.

205. *Simorhynchus Cassini* Coues, Proc. Phil. Acad., 1867. (722a.) Cassin's Auk. While becalmed in the Ounimak Pass this bird flew aboard, and was put in the chicken coop, where it was trodden to death during the night. It was a male, evidently not adult, with the iris a dead white, and the pupil, of course, black. The date was August 3rd, 1866. D.

206. *Uria columba* Cas. (727.) Western Guillemot. Not uncommon at Sitka, where Bischoff obtained twenty specimens, and also abundant at Kadiak, where the eggs were obtained. D.

207. *Uria lomvia* Brün. (729.) Foolish Guillemot. Obtained by Bischoff, sparingly, at Kadiak. D.

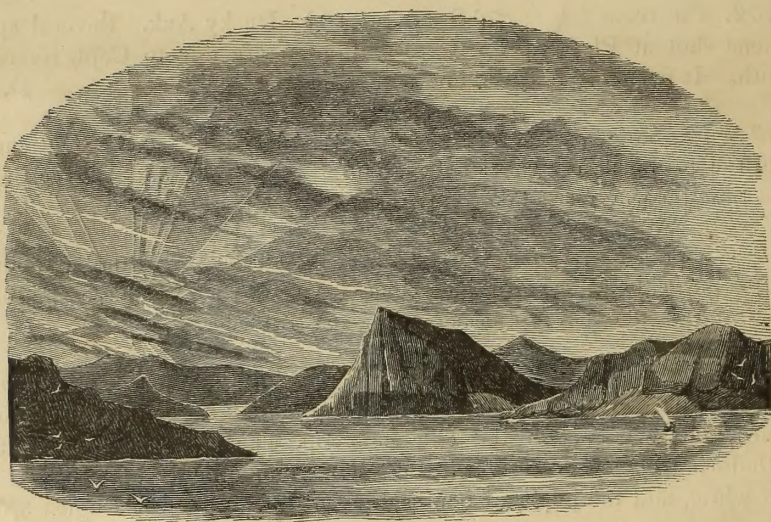
208. *Uria californica* Bryant. (730a.) Californian Guillemot. Obtained with the eggs by Bischoff, at Sitka and Kadiak. D.

209. *Uria arra* Pallas. (731.) Thick-billed Guillemot. Not uncommon at Kadiak, and abundant at St. George's in August, where it breeds on the perpendicular cliffs. D.

210. *Brachyrhamphus marmoratus*. (732.) Marbled Guillemot. Obtained at Sitka, by Bischoff, in numbers. D.

211. *Brachyrhamphus Wrangeli* Br. (733.) Wrangel's Guillemot.
Several specimens obtained by Bischoff at Sitka. D.

212. *Brachyrhamphus antiquus* Br. (736.) Ancient Auk; Sta-
reek (Rus.). Common at St. George's, also at Amak Island, north of the
peninsula of Aliaska, and obtained at Sitka by Bischoff. D.



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